

# SERVICE MANUAL

## BA-4 CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>	<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
KV-13M40	RM-Y156	US	SCC-S01E-A	KV-21SE80A	RM-Y135A	E	SCC-S04M-A
KV-13M40	RM-Y156	CND	SCC-S03D-A	KV-21MB40C	RM-Y156	E	SCC-S04F-A
KV-13M50	RM-Y156	US	SCC-S01G-A	KV-21MB40M	RM-Y156	MX	SCC-S02B-A
KV-13M51	RM-Y156W	US	SCC-S01F-A	KV-21MB40P	RM-Y156	E	SCC-S04E-A
KV-14MB40	RM-Y156	E	SCC-S04P-A	KV-21ME40	RM-Y156	E	SCC-S04B-A
KV-14MB40C	RM-Y156	E	SCC-S04N-A	KV-21SB40C	RM-Y155	E	SCC-S04H-A
KV-14MB40A	RM-Y156	E	SCC-S04Q-A	KV-21SB40M	RM-Y155	MX	SCC-S02A-A
KV-20M40	RM-Y156	US	SCC-S01A-A	KV-21SB40P	RM-Y155	E	SCC-S04J-A
KV-20M40	RM-Y156	CND	SCC-S03C-A	KV-21SE80	RM-Y135A	E	SCC-S04L-A
KV-20S40	RM-Y155	US	SCC-S01C-A	KV-21SE80C	RM-Y135A	E	SCC-S04K-A
KV-20S40	RM-Y155	CND	SCC-S03A-A	KV-21SE40	RM-Y155	E	SCC-S04A-A
KV-20S41	RM-Y156W	US	SCC-S01B-A	KV-21SE40C	RM-Y155	E	SCC-S04C-A
KV-20S41	RM-Y156W	CND	SCC-S03L-A	KV-21SE40A	RM-Y155	E	SCC-S04D-A
KV-20V80	RM-Y135A	US	SCC-S01D-A	KV-21XT4A	RM-Y155	E	SCC-S04G-A
KV-20V80	RM-Y135A	CND	SCC-S03B-A	KV-21ME40C	RM-Y156	E	SCC-S04W-A



TRINITRON® COLOR TV  
**SONY**®

## SPECIFICATIONS

KV-	13M40* 13M50** 13M51** 14MB40*	14MB40C* 14MB40A**	20M40 20S40 20S41	21MB40M 21MB40P 21SB40P 21SB40M	21MB40C 21SB40C 21XT4A	20V80* 21SE80**	21SE80A 21SE80C	21ME40 21SE40	21SE40C 21SE40A 21ME40C
Power Requirements	120V, 60 Hz	220V, 50/60 Hz	120V, 60Hz	120V, 60Hz	220V, 50/60Hz	120V, 60Hz	220V, 50/60 Hz	120V, 60 Hz	220V, 50/60Hz
Number of Inputs/Outputs									
Video <sup>1)</sup>	1*/2**	1*/2**	2	2	2	2	2	2	2
S Video <sup>2)</sup>	-	-	-	-	-	1*/-**	-	-	-
Audio <sup>3)</sup>	1*/2**	1*/2**	2	2	2	2*/**	2	2	2
Audio Out <sup>4)</sup>	-	-	-	-	-	1*/**	1	-	-
Speaker Output (W)	3W	3W	3W (M40) 3W x 2 (S40/41)	3W (MB40M/40P) 3W x 2 (SB40M/40P)	3W(MB40C) 3W x 2 (SB40C/XT4A)	5W x 2	5W x 2	3W x 2 (ME40) 4W x 2 (SE40)	4W x 2 (SE40A/40C) 3W x 2 (ME40C)
Power Consumption (W)									
In use (Max.)	75W	80W	80W (M40 ) 90W (S40/41 ) 8W	80W (MB40M/40P) 90W (SB40M/40P) 8W	85W (MB40C) 95W (SB40C)/(XT4A) 10W	100W	105W	90W	95W
In standby	8W	10W				8W	10W	8W	10W
Dimensions (W/H/D) (mm)	358 x 342 x 401 mm	358 x 342 x 401 mm	522 x 477 x 479 mm	522 x 477 x 479 mm	522 x 477 x 479 mm	556 x 464.5 x 474.9 mm	556 x 464.5 x 474.9 mm	610 x 464.5 x 469..5 mm	610 x 464.5 x 469..5 mm
(in.)	14 <sup>1/8</sup> x 13 <sup>1/2</sup> x 15 <sup>3/4</sup> in.	14 <sup>1/8</sup> x 13 <sup>1/2</sup> x 15 <sup>3/4</sup> in.	21 x 18 <sup>3/4</sup> x 18 <sup>7/8</sup>	21 x 18 <sup>3/4</sup> x 18 <sup>7/8</sup>	21 x 18 <sup>3/4</sup> x 18 <sup>7/8</sup>	21 <sup>7/8</sup> x 18 <sup>1/4</sup> x 18 <sup>2/3</sup> in.	21 <sup>7/8</sup> x 18 <sup>1/4</sup> x 18 <sup>2/3</sup> in.	24 x 18 x 18 <sup>1/2</sup> in.	24 x 18 x 18 <sup>1/2</sup> in.
Mass (kg) (lbs)	10 kg 22 lbs.	10 kg 22 lbs.	21.6 kg 48 lbs.	21.6 kg 48 lbs.	21.6 kg 48 lbs.	22.6 kg 49 lbs. 3 oz.	22.6 kg 49 lbs. 3 oz.	20.6 kg 45 lbs.	20.6 kg 45 lbs.

### Television System

American TV Standard (all models except: KV-14MB40A/21SE40A/21XTA4/21SE80A)  
PAL-M, PAL-N, NTSC (for KV-14MB40A/21SE40A/21XTA4/21SE80A only)

### Channel Coverage

VHF: 2-13 / UHF: 14-69 / CATV: 1-125

### Picture Tube

Trinitron Tube

### Visible Screen Size

13-inch picture measured diagonally  
20-inch picture measured diagonally

### Actual Screen Size

14-inch picture measured diagonally  
21-inch picture measured diagonally

### Antenna

75 ohm external terminal for VHF/UHF

### Supplied Accessories

Remote commander (w/2 size AA (R6) batteries)

RM-Y156: (KV-13M40/13M50/14MB40/20M40/21MB40/  
21MB40P/21MB40C/14MB40C/14MB40A/21ME40/21ME40C only)

RM-156W: (KV-13M51/20S41 only)

RM-Y155: (KV-20S40/21SB40M/21SB40P)

21SB40C/21XT4A/21SE40/21SE40C/21SE40A only)

RM-Y135A: (KV-20V80/21SE80/21SE80A/21SE80C only)

Antenna Dipole (7 models)

(KV-21SE80A/21SE40A/21XT4A/13M40/13M50/13M51/14MB40A only)

Antenna Connector

(all models except: KV-20M40/20S40/20S41/21SE80/21SE80C/20V80)

### Optional Accessory

Antenna dipole (KV-20M40/20S40/20S41 only)

<sup>1)</sup> 1 Vp-p 75 ohms unbalanced, sync negative

<sup>2)</sup> Y: 1 Vp-p 75 ohms unbalanced, sync negative  
C: 0.286 Vp-p (Burst signal), 75 ohms

<sup>3)</sup> 500 mVrms (100% modulation), Impedance: 47 kilohms

<sup>4)</sup> More than 408 mVrms at the maximum volume setting (variable)

More than 408 mVrms (fix)  
Impedance: 50 kilohms

**Design and specifications are subject to change without notice.**

### (●) ® SRS (SOUND RETRIEVAL SYSTEM)

The (●) SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

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(For KV-21SE80/21SE80A/21SE80C/20V80 only)

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## WARNINGS AND CAUTIONS

### **CAUTION!**

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

### **WARNING!!**

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

### **SAFETY-RELATED COMPONENT WARNING!!**

COMPONENTS IDENTIFIED BY SHADING AND MARK  $\triangle$  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

### **ATTENTION**

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

### **ATTENTION!!**

AFIN D'EVITER TOUT RESQUE D'ELECTROCUTION PROVENANT D'UN CHASSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISE LORS DE TOUT DEPANNAGE, LE CHASSIS DE CE RECEPTEUR EST DIRECTEMENT RACCORDE A L'ALIMENTATION SECTEUR.

### **ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!**

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MARQUE  $\triangle$  SUR LES SCHEMAS DE PRINCIPE, LES VUES EXPLOSEES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMERO DE PIECE EST INDIQUE DANS LE PRESENT MANUEL OU DANS DES SUPPLEMENTS PUBLIES PAR SONY. LES REGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRESENT MANUEL. SUIVRE CES PROCEDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONTIONNEMENT SUSPECTE.

## SELF-DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash. The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

### **DIAGNOSTIC TEST INDICATORS**

When an error occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

Results for all of the following diagnostic items are displayed on screen. No error has occurred if the screen displays a "0".

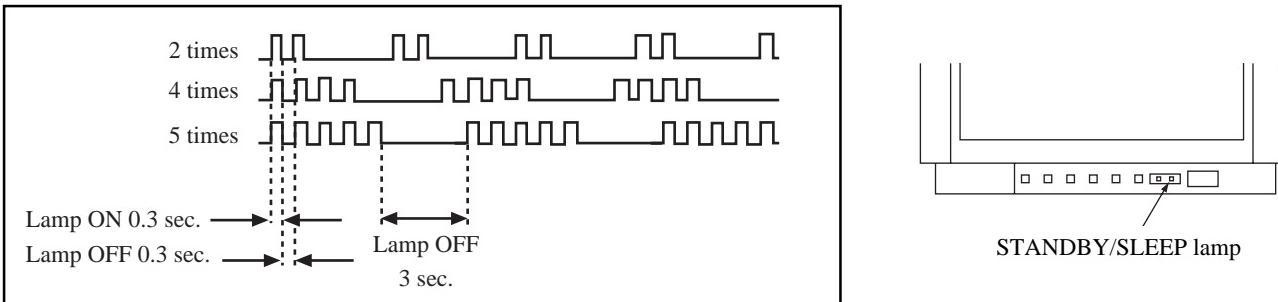
Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/ Diagnostic result	Probable Cause Location	Detected Symptoms
* Power does not turn on	Does not light	_____	* Power cord is not plugged in. * Fuse is burned out (F601)	* Power does not come on. * No power is supplied to the TV. * AC power supply is faulty.
* +B overcurrent (OCP)	2 times	2:0 or 2:1	* H.OUT (Q502) is shorted. (A board) * IC751 (for 13"), IC701 and Q701 (for 20"/21") is shorted. (C board)	* Power does not come on. * Load on power line is shorted.
* Vertical deflection stopped	4 times	4:0 or 4:1	* +13V is not supplied. (A board) * IC 541 is faulty (A board)	* Has entered standby state after horizontal raster. * Vertical deflection pulse is stopped. * Power line is shorted or power supply is stopped.
* White balance failure (not balanced)	5 times	5:0 or 5:1	* Video OUT (Q394 to 392) is faulty. (A board) * IC301 is faulty. (A board) * G2 is improperly adjusted. (Note 2)	* No raster is generated. * CRT cathode current detection reference pulse output is small.

Note 1: If a +B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously.

The symptom that is diagnosed first by the microcontroller is displayed on the screen.

Note 2: Refer to Screen (G2) Adjustment in Section 3-4 of this manual.

## DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT



Diagnostic Item	Flash Count*
+B overcurrent	2 times
Vertical deflection stopped	4 times
White balance failure	5 times

\* One flash count is not used for self-diagnostic.

## STOPPING THE STANDBY/TIMER FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

## SELF-DIAGNOSTIC SCREEN DISPLAY

For errors with symptoms such as "power sometimes shuts off" or "screen sometimes goes out" that cannot be confirmed, it is possible to bring up past occurrences of failure for confirmation on the screen:

### [To Bring Up Screen Test]

In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Screen display → channel [5] → Sound volume [-] → Power ON

↑

Note that this differs from entering the service mode (sound volume [+]).

### Self-Diagnostic screen display

SELF DIAGNOSTIC		
2:	0	<-----Numeral "0" means that no fault has been detected.
3:	N/A	0
4:	0	
5:	1	<-----Numeral "1" means a fault has been detected one time only.
101:	N/A	0

## HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to "0".

Unless the result display is cleared to "0", the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

### [Clearing the result display]

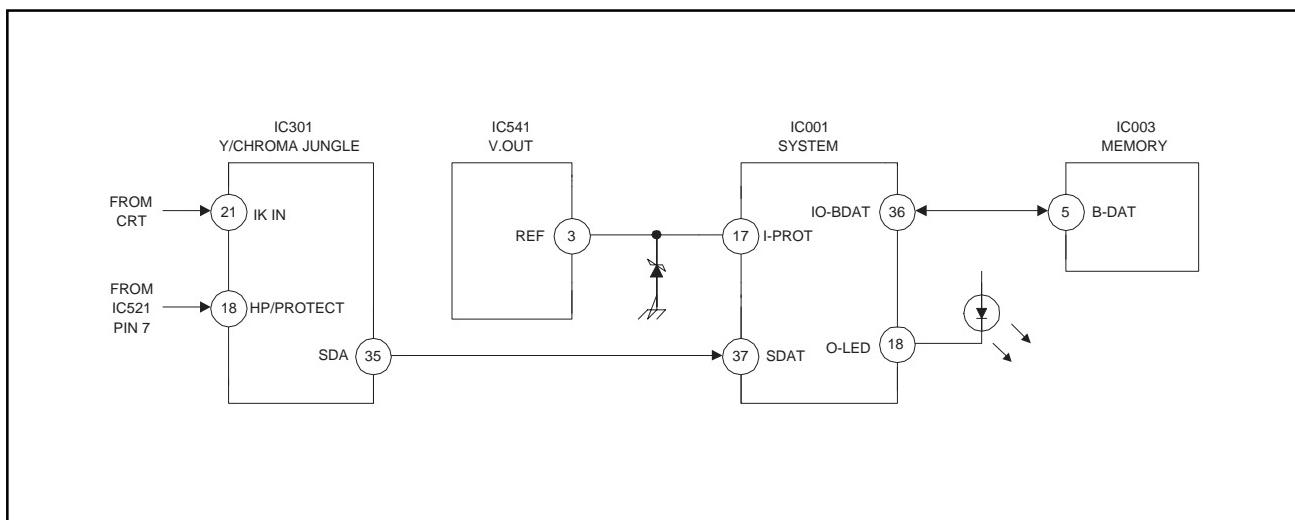
To clear the result display to "0", press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel [8] → ENTER

### [Quitting Self-diagnostic screen]

To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

## 6. SELF-DIAGNOSTIC CIRCUIT



### +B overcurrent (OCP)

Occurs when an overcurrent on the +B(115V) line is detected by pin 18 of IC301. If the voltage to pin 18 of IC301 is less than 1V when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.

### Vertical deflection stopped

Occurs when an absence of the vertical deflection pulse is detected by pin 17 of IC001. Power supply will shut down when waveform interval exceeds 2 seconds.

### White balance failure

If the RGB levels\* do not balance within 2 seconds after the power is turned on, this error will be detected by IC301. TV will stay on, but there will be no picture.

*\*(Refers to the RGB levels of the AKB detection Ref pulse that detects IK.)*

## SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC Leakage. Check leakage as described below.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampere). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson's 250 and Sanwa SH-63Trd are examples of passive VOMs that are suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

### HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

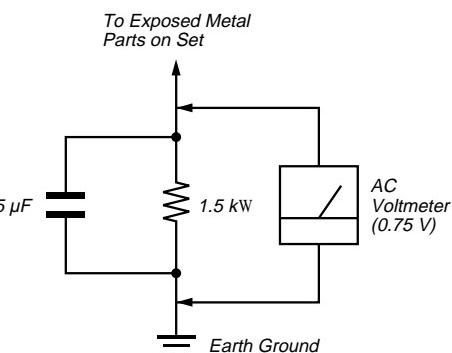


Fig. A. Using an AC voltmeter to check AC leakage.

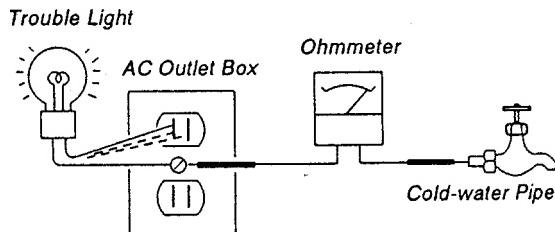


Fig. B. Checking for earth ground.

## SECTION 1-1 GENERAL

The instructions mentioned in this section are partial abstracts from the Operating Instruction Manual. The pages numbers shown reflect those of the Operating Instruction Manual.

### Warnings and Cautions

**To prevent fire or shock hazard, do not expose the TV to rain or moisture.**



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**CAUTION**  
When using TV games, computers, and similar products with your TV, keep the brightness and contrast controls at low settings. If a fixed (non-moving) pattern is left on the screen for long periods of time at a high brightness or contrast setting, the image can be permanently imprinted onto the screen. Continuously watching the same channel can cause the imprint of station logos onto the TV screen. These types of imprints are not covered under your warranty because they are the result of misuse.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

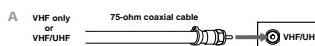
**Safety Precautions**  
 • Operate the TV only on 120 VAC.  
 • One blade of the power plug is wider than the other for safety purposes and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer. TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

### Step 1: Connecting the TV

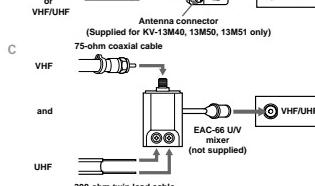
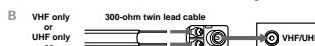
The following steps guide you through your initial set up. Check the model number of your TV (located on the front of this manual) and select the appropriate diagram.

#### Connecting an Indoor, Outdoor or Cable Antenna

This connection offers the best picture quality. Connection is made directly from the cable or antenna to the TV.

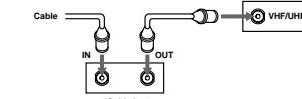


If you cannot connect your antenna or cable directly to the TV antenna terminal, follow one of the diagrams below.



#### Connecting to a Cable TV System Through a Cable Box

Some pay cable TV systems use scrambled or encoded signals that require a cable box\* to view all channels.



#### Note

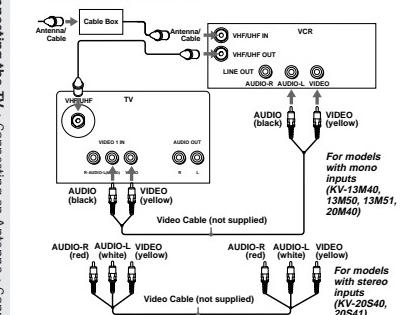
- If you will be controlling all channel selection through your cable box, you should consider using the CHANNEL FIX feature discussed on page 11.

### Warnings and Cautions • Connecting the TV • Connecting an Antenna • Connecting a Cable Box

#### Connecting a VCR

See your VCR instructions to set up the VCR. After connecting the VCR to the TV, you will be able to do the following:

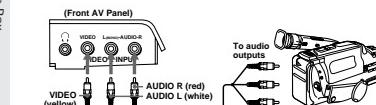
- Watch video tapes
- Record one TV program while viewing another
- Notes
  - If your cable system requires the use of a cable box, install it between the cable and the VCR.
  - For a monaural VCR, connect the audio output of the VCR to the AUDIO L (MONO) on the TV.



#### Connecting a Camcorder

##### All models except KV-13M40

Use this connection to view a video tape from a camcorder.



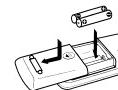
#### Notes

- For a monaural camcorder, connect the audio output of the camcorder to AUDIO L (MONO) on the TV.
- If you are connecting your camcorder to a monaural TV (KV-13M50, 13M51, 20M40 only), plug the white audio connector into the AUDIO-L input on the TV.
- You can also connect a camcorder to inputs on the rear of the TV (all models).

### Step 2: Using the Remote Control

#### Inserting Batteries

Insert two size AA (R6) batteries (supplied) by matching the + and - on the batteries to the + and - inside the battery compartment. With normal use, the batteries should last for approximately six months.

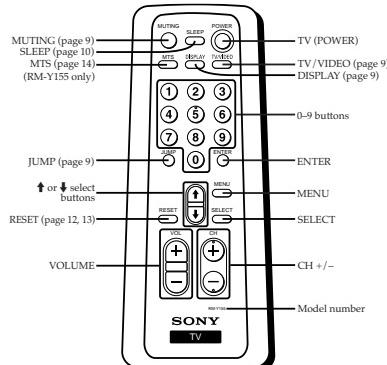


#### Notes

- Remove the batteries to avoid possible damage from battery leakage if you will not be using the remote control for an extended period of time.
- Handle the remote control with care. Avoid dropping it, getting it wet, or placing it in direct sunlight, near a heater, or where the humidity is high.

#### Remote Control Operation Buttons

In the instructions that follow, please refer to the buttons on your remote control. The remote control shown is model RM-Y155.



## Step 3: Setting Menu Language

### Changing the Menu Language

#### Except Canadian models

The menu illustrations are for KV-20S40. Your on-screen menus may not look like those used within this manual. When a feature is only available to a limited set of models, those models will be listed.

If you want to view the menus in Spanish, you can change the menu language.

#### 1 Press MENU.



The main menu appears. Move the cursor  $\uparrow$  or  $\downarrow$  to the SET UP menu, press SELECT.



#### 2 Press $\uparrow$ or $\downarrow$ to move the cursor to LANGUAGE and press SELECT.

ENGLISH will appear red.

#### 3 Press $\uparrow$ or $\downarrow$ to select ESPAÑOL and press SELECT.

ESPAÑOL will turn red and the menu will appear in Spanish.

#### 4 Press MENU to return to the TV program.



## Step 4: Setting up Your Channels

### Setting Up the TV Automatically

#### KV-20M40, 20S40, 20S41 only

The Easy Set Up Guide allows you to set up the on-screen language and set all receivable channels. (The Easy Set Up Guide screen appears every time you turn on the TV until you perform AUTO PROGRAM.)

#### 1 Press POWER to turn on your TV.

The Easy Set Up Guide screen appears.

#### 2 (Except Canadian Models) Press CH + to select English screens or CH - to select Spanish screens.

3 Press VOL + to continue or VOL - for a DEMO of functions and menus.

#### To perform this function again

Press the SET UP button on your TV.

### Auto Programming Your Channels (AUTO PROGRAM)

The AUTO PROGRAM feature allows you to set all receivable channels in one step. After this function is completed, you may delete unwanted channels or add additional channels.

#### Notes

- If the TV is set to VIDEO, you cannot run AUTO PROGRAM. Press TV/VIDEO on the remote control until a channel number appears.
- It is usually best to preset channels during the day when more channels are broadcasting and receivable.

#### 1 Press MENU.



#### 2 Move the cursor $\uparrow$ or $\downarrow$ to the SET UP menu and press SELECT.

The SET UP menu appears.

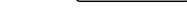
#### 3 Move the cursor $\uparrow$ or $\downarrow$ to CHANNEL SET UP and press SELECT.

#### 4 Move the cursor $\uparrow$ or $\downarrow$ to AUTO PROGRAM and press SELECT.

AUTO PROGRAM appears on the screen and the TV starts scanning and presetting channels.

#### Notes

- Pressing any button on the remote control while AUTO PROGRAM is scanning and presetting channels will cause AUTO PROGRAM to stop.
- When you run AUTO PROGRAM your CHANNEL FIX and ON/OFF TIMER settings will be erased.



## Additional Features

### Setting the SLEEP Timer

The SLEEP timer programs the TV to stay on for a length of time and then shut off automatically.

- Press SLEEP until the length of time you want the TV to stay on appears. SLEEP appears one minute before the TV shuts off.
- To cancel the sleep timer, press SLEEP again until SLEEP OFF appears, or turn off the TV.



### Setting DAYLIGHT SAVING

#### All models except KV-13M40

You can program DAYLIGHT SAVING to automatically adjust the time.

- Press MENU and select the TIMER  menu.
- Move the cursor to DAYLIGHT SAVING and press SELECT.
- Press  or  to select YES or NO based on the following options:

Spring: Select YES, the current time moves one hour ahead.  
Fall: Select NO, the current time moves back one hour.

### Setting the clock (CURRENT TIME SET)

#### All models except KV-13M40

- Press MENU and select the TIMER  menu.
- Move the cursor to CURRENT TIME SET and press SELECT.



SUN 10:02 AM  
Move  Select  Exit 

- Set the current day. Press SELECT and press  or  until the day entry is highlighted, press SELECT.

4 Set the current time. Press SELECT until the time entry is highlighted. Press  or  until the current hour is displayed and press SELECT. Press  or  until the current minute is displayed and press SELECT.



SUN 10:02 AM  
Move  Select  Exit 

### Setting the ON/OFF TIMER

#### All models except KV-13M40

You can program your TV for scheduled viewing using the ON/OFF TIMER. The CURRENT TIME SET must be set in order for the ON/OFF TIMER to function.

- Press MENU and select the TIMER  menu.
- Move the cursor to ON/OFF TIMER and press SELECT.



Move  Select  Exit 

## Additional Features (continued)

### Enter the ON/OFF TIMER setting.

- Press SELECT until the day entry is highlighted. Press  or  to cycle through the day options. Select an entry and press SELECT.
- Press SELECT until the time entry is highlighted. Press  or  to set the hour and press SELECT. Press  or  to set the minute and press SELECT.
- Press  or  to set the duration, up to six hours, and press SELECT.
- The TIMER indicator, on the front of the TV, will light up.



SUN 10:02 AM  
Move  Select  Exit 

### To erase your ON/OFF TIMER settings

Press RESET, while in the TIMER menu.

#### Note

- If you exit the ON/OFF TIMER menu while setting the TIMER, your settings will be saved.

### Setting FAVORITE CHANNEL

This feature provides quick access to your favorite channels.

- Press MENU and select the SET UP  menu.
- Move the cursor to FAVORITE CHANNEL and press SELECT.



Move  Select  Exit 

- Press  or  to select AUTO or MANUAL and press SELECT. Selecting AUTO will display the last five channels chosen with the remote control's 0-9 buttons.
- Press  or  to select 1, 2, 3, 4 or 5 and press SELECT.
- Press  or  to highlight the desired channel and press SELECT.



Move  Select  Exit 

### To use FAVORITE CHANNEL

Press SELECT when in normal viewing mode. Your options will appear on the screen.

### Setting CHANNEL FIX

This feature is useful when you want to control all channel selection through a cable box or video equipment.

- Press MENU and select the SET UP  menu.
- Move the cursor  or  to CHANNEL SET UP and press SELECT.



Move  Select  Exit 

- Select CHANNEL FIX and set your TV to one of the following options:  
2-6: When the cable box is connected to VHF/UHF input. Use your cable box remote to change channels.  
VIDEO 1: When you have connected video equipment (e.g. DSS receiver) and you want the TV fixed to it. You will be able to alternate between video sources.  
OFF: When you want to switch CHANNEL FIX off.



Move  Select  Exit 

- Notes
- For information on connecting a cable box, see page 3.
  - ON/OFF TIMER settings will be erased when CHANNEL FIX is set.
  - FAVORITE CHANNEL can not be accessed when CHANNEL FIX is set.

## Blocking out a Channel (CHANNEL BLOCK)

This feature is useful in preventing child access to designated channels.

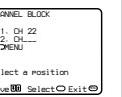
- Press MENU and select the SET UP  menu.
- Move the cursor  or  to CHANNEL BLOCK and press SELECT.



Move  Select  Exit 

- Move the cursor to 1 or 2 and press SELECT.
- Press  or  to the feature you want to adjust and press SELECT.

When you try to tune to the blocked channel, BLOCKED will appear on the screen. CAPTION VISION will also be blocked.



Move  Select  Exit 

### To erase your CHANNEL BLOCK settings

Press RESET, while in the CHANNEL BLOCK menu.

### Selecting CAPTION VISION

Some programs are broadcast with CAPTION VISION. These services are sometimes limited to specific broadcasting networks and may not be available in your area. (CC1 is the default setting).

- Press MENU and select the SET UP  menu.
- Move the cursor  or  to CAPTION VISION and press SELECT.
- Press  or  to set your TV to one of the following options:



Move  Select  Exit 

- Choose To Display
- |                              |  |
|------------------------------|--|
| CC1, 2, 3 or 4               | A printed version of the dialog or sound effects of a program. (The default setting is CC1). |
| TEXT 1, 2, 3 or 4            | Station/network related information that usually is not related to the program.              |
| XDS (Extended Data Services) | A program's type, name, length and call letters.   |
- 4 Press DISPLAY. The caption will appear in a few seconds, if available.
- 5 To turn off CAPTION VISION, press DISPLAY until DISPLAY OFF appears.

#### Notes

- Captions disappear for a few seconds when you press the MUTING button.
- Captions may appear with a white box or other errors, if you have poor reception on the channel.

## Using the VIDEO Menu

### Adjusting the VIDEO Settings

You can adjust the PICTURE, BRIGHTNESS, COLOR, HUE, and SHARPNESS of any TV image.

- Press MENU and select the VIDEO  menu.



- Move the cursor  or  to the feature you want to adjust and press SELECT. See the ADJUSTABLE ITEMS chart below for a list of the adjustments you can make.

### ADJUSTABLE ITEMS

Item	Press  to	Press  to
PICTURE	Increase the contrast	Decrease the contrast
BRIGHTNESS	Brighten the picture	Darken the picture
COLOR	Increase color intensity	Decrease color intensity
HUE	Increase the green tones	Decrease the green tones
SHARPNESS	Sharpen the picture	Soften the picture

- Press MENU to return to the TV program.

### Restoring the factory video settings

Press RESET, while in the VIDEO menu.

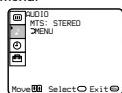
## Audio Menu

### Selecting Stereo or Bilingual Programs (MTS)

#### KV-20S40, 20S41 only

The Multichannel TV Sound (MTS) feature allows you to enjoy Stereo Sound (STEREO), Second Audio Programs (SAP), or Monaural Sound (MONO) when available.

- 1 Press MENU and select the AUDIO menu.
- 2 Move the cursor to MTS and press SELECT.



- 3 Press **♦** or **◆** to select STEREO, SAP, or MONO and press SELECT.

Choose	To
STEREO	Listen to stereo sound.
SAP	Listen to bilingual and other programs.
MONO	Reduce noise during poor stereo broadcasts.

#### For Direct MTS Access

Press MTS repeatedly to cycle through the MTS options.

##### Note

- If your TV does not have sound, try changing your MTS setting.

## Troubleshooting

If you are having a problem with your TV, try the suggestions below. If the problem persists, contact your nearest Sony dealer.

Problem	Suggestion
No picture, no sound	<ul style="list-style-type: none"> <li>Make sure the power cord is connected.</li> <li>If a red light keeps flashing on the front of your TV, for more than a few minutes, call your local service center.</li> <li>Check the TV /VIDEO setting: when watching TV, set to TV; when watching video tapes, set to VIDEO (page 9).</li> <li>Make sure the batteries have been inserted correctly into the remote control.</li> <li>Try another channel. It could be station trouble.</li> </ul>
Poor or no picture, good sound	<ul style="list-style-type: none"> <li>Adjust PICTURE in the VIDEO menu (page 13).</li> <li>Adjust BRIGHTNESS in the VIDEO menu (page 13).</li> <li>Check the antenna and/or cable connections (page 3).</li> </ul>
Good picture, no sound	<ul style="list-style-type: none"> <li>Press MUTING so that MUTING disappears from the screen (page 9).</li> <li>Check your AUDIO settings. Your TV may be set to SAP (page 14).</li> </ul>
No color	<ul style="list-style-type: none"> <li>Adjust COLOR in the VIDEO menu (page 13).</li> <li>Make sure that a black and white program is not being broadcast.</li> </ul>
Only snow appears on the screen	<ul style="list-style-type: none"> <li>Check the CABLE setting in the SET UP menu (page 8).</li> <li>Check the antenna and/or cable connections (page 3).</li> <li>Make sure the channel selected is currently broadcasting.</li> </ul>
Dotted lines or stripes	<ul style="list-style-type: none"> <li>Adjust the antenna.</li> <li>Move the TV away from other electronic equipment. Some electronic equipment can create electrical noise, which can interfere with TV reception.</li> </ul>
Double images or ghosts	<ul style="list-style-type: none"> <li>Check your outdoor antenna or call your cable service.</li> </ul>
Cannot receive higher number channels (UHF) when using an antenna	<ul style="list-style-type: none"> <li>Make sure CABLE is set to OFF in the SET UP menu (page 8).</li> <li>Use AUTO PROGRAM to add channels that are not presently in the memory (page 7).</li> </ul>
Cable stations don't seem to work	<ul style="list-style-type: none"> <li>Make sure CABLE is set to ON in the SET UP menu (page 8).</li> <li>Use AUTO PROGRAM to add channels that are not presently in the memory (page 7).</li> </ul>
Remote control does not operate	<ul style="list-style-type: none"> <li>Batteries could be weak. Replace them (page 5).</li> <li>Move the TV 3-4 feet away from fluorescent lights.</li> </ul>
The TV needs to be cleaned	<ul style="list-style-type: none"> <li>Clean the TV with a soft dry cloth. Never use strong solvents such as thinner or benzine, which might damage the finish of the cabinet.</li> </ul>
The TV is fixed to one channel	<ul style="list-style-type: none"> <li>Try turning CHANNEL FIX off (page 11).</li> <li>Use AUTO PROGRAM to add receivable channels that are not presently in the TV memory (page 7).</li> </ul>

If, after reading these operating instructions, you have additional questions related to the use of your Sony television, please call our Direct Response Center at 1-800-222-SONY (7669).

## SECTION 1-2 GENERAL

Las instrucciones contenidas en esta sección, son abstractos del manual de instrucciones y operacion. La numeración de las paginas hacen referencia el numero de pagina en el manual original.

### Advertencias

Para evitar el riesgo de incendios o de descargas eléctricas, no exponga al televisor a la lluvia ni a la humedad.



Este símbolo sirve para indicar al usuario que la presencia de altas tensiones sin aislar en el interior de este producto, las que pueden ser de una magnitud que presente riesgo de descargas eléctricas.

Este símbolo sirve para indicar al usuario que el manual que acompaña a este producto es general y no incluye instrucciones importantes referentes al funcionamiento y mantenimiento del producto.

#### PRECAUCIÓN

Al utilizar videojuegos, computadoras o productos similares con el televisor, mantenga las preferencias de brillo y contraste a un nivel bajo. Si una imagen fija permanece en la pantalla durante mucho tiempo con elevada intensidad de brillo o contraste, la imagen puede quedar grabada en la pantalla de forma permanente. Igualmente, ver continuamente el mismo programa de televisión podría dejar grabada en la pantalla el logotipo de la emisora. La garantía no cubre estas quemaduras de la pantalla, ya que se deben al mal uso del aparato.

Cualquier cambio o modificación que no se detalla expresamente en el presente manual podría anular su autorización para emplear este aparato.

#### Precauciones de seguridad

- Alimente el televisor exclusivamente con 120 V CA (con excepción KV-14MB40C, 21MB40C, 21ME40C, 21SB40C, 21SE40C).

- Alimente el televisor exclusivamente con 220 V CA (solo KV-14MB40C, 21MB40C, 21ME40C, 21SB40C, 21SE40C).

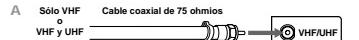
- Por motivos de seguridad, un contacto de la clavija del cable eléctrico de este aparato es más grande que el otro. La clavija entra en el enchufe en solamente una posición. Si no puede introducirlo totalmente en el enchufe, consulte con su concesionario.
- PARA EVITAR DESCARGAS ELÉCTRICAS, NO USE ESTA CLAVIJA POLARIZADA A MENOS QUE LOS CONTACTOS QUEDEN COMPLETAMENTE DENTRO DEL ENCHUFE.

### Paso 1: Instalación

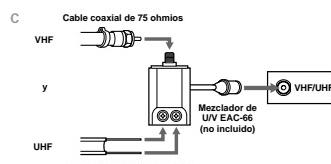
Este instructivo le guiará durante la instalación de su televisor. Siga las indicaciones de los dibujos correspondientes a su televisor (el número de modelo aparece en la portada de este manual) y seleccione el diagrama apropiado.

#### Conexión a Antena Interior, Exterior o de Cable

Utilice esta conexión para lograr una óptima calidad de imagen. Se conecta el cable o la antena directamente al televisor.

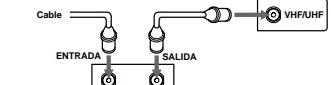


Si no se puede conectar la antena o el cable directamente a la terminal de antena del televisor, utilice las instrucciones de la ilustración correspondiente.



#### Conexión a Sistema de Cable por Medio de Decodificador.

Algunos sistemas de televisión por cable de paga usan señales deformadas o codificadas que requieren un decodificador\* para poder ver todos los canales.



#### Nota

- Si va a hacer la selección de todos los canales a través de su decodificador, debe usted considerar la posibilidad de usar la función FIJAR CANAL, que se describe en la página 11.

**Nota sobre CAPTION VISION**  
Este aparato de televisión permite ver texto sobreimpreso a las imágenes, en cumplimiento con lo dispuesto en el inciso 15.119 de las normas de la Comisión Federal de Comunicaciones (FCC) de EUA.

#### Nota para el técnico que instala el sistema de cable

El número de código de NEC contiene normas para la puesta a tierra y en particular dispone que la tierra del cable debe conectarse al sistema de puesta a tierra del edificio, en el punto más cercano a la entrada del cable como sea factible.

El empleo de este televisor para fines que no sean el de ver en privado programas de televisión de la red o de la AFP, transmitidos por compañías de cable para uso del público en general, puede requerir la autorización de la emisora o compañía de cable, del propietario del programa o de ambos.

### Advertencias • Instalación • Conexión a Antena

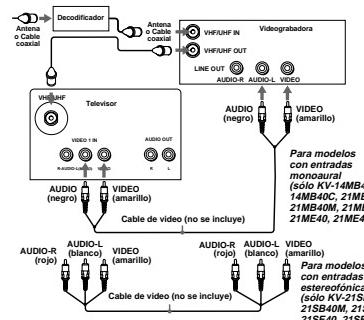
### Conexión a Videograbadora

Consulte las instrucciones para instalar la videograbadora. Una vez conectada la videograbadora al televisor, podrá:

- Ver videocintas
- Grabar un programa de televisión mientras ve otro

#### Notas

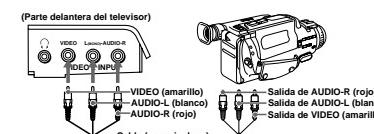
- Si su sistema de cable requiere de un decodificador, conectéelo entre el cable y la videograbadora.
- Si utiliza una videograbadora monaural, conecte la salida de audio de la videograbadora al conector AUDIO L (MONO) del televisor.



### Conexión a Cámara de Video

#### Con excepción KV-14MB40, 14MB40C

Utilice esta conexión para ver la videocinta de una cámara de video.



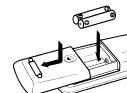
#### Notas

- Si utiliza una cámara de video monaural, conecte la salida de audio de la cámara al enchufe AUDIO L (MONO) del televisor.
- Si conecta su cámara de video a un televisor monaural (solo KV-14MB40, 14MB40C, 21MB40, 21ME40, 21ME40C), enchufe la clavija blanca de audio de la cámara en la entrada de AUDIO L del televisor.
- También puede conectar su cámara de video a las entradas localizadas en la parte posterior del televisor (todos los modelos).

### Paso 2: Uso del Control Remoto

#### Instalación de las Pilas

Inserte dos pilas AA (R6) (se incluyen). Asegúrese que los signos + y - de las pilas concuerden con los signos + y - dentro del control remoto. Las pilas deben durar aproximadamente 6 meses con uso normal.

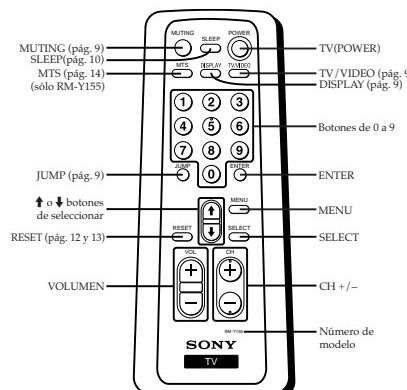


#### Notas

- Para evitar el daño que podría causar la fuga de electrolito de las pilas, saquelas del compartimiento si no piensa utilizar el control remoto durante largo tiempo.
- Maneje el control remoto con cuidado. No lo deje caer ni permita que se moje. No lo coloque bajo la luz solar directa, cerca de un calentador o en lugares húmedos.

#### Operación de los Botones del Control Remoto

Las siguientes instrucciones se refieren a los botones de su control remoto. El dibujo corresponde al control remoto RM-Y155.



#### Si pierde su control remoto

#### Con excepción KV-14MB40, 14MB40C

Usted puede usar los botones en la parte delantera del televisor para controlar los menús y cambiar los canales.

### Paso 3: Ajuste de Idioma de los Menús

#### Cambio de Idioma de los Menús

Las ilustraciones de los menús que se utilizan corresponden al modelo KV-21SE40. Es posible que sus menús en pantalla no aparezcan igual que aquellos utilizados en este manual. Al presentar funciones que se encuentren en otros modelos, el manual indicará los números de modelo correspondientes.

Si prefiere ver los menús en inglés, puede cambiar el idioma de los menús.

- Oprima MENU.  
Aparece el menú principal.  
Coloque el cursor **▲** o **▼** en el menú de PREFERENCIAS  y oprima SELECT.

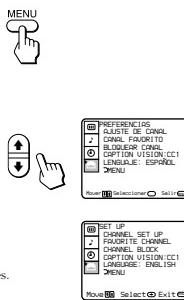
- Oprima **▲** o **▼** para colocar el cursor en LÉNGUAJE y oprima SELECT.  
La palabra ESPAÑOL se pondrá roja.

- Oprima **▲** o **▼** para colocar el cursor en ENGLISH y oprima SELECT.  
ENGLISH se pondrá roja y los menús aparecerán en inglés.

- Para volver a la pantalla normal, oprima MENU.

#### Nota

- Con excepción de los modelos KV-14MB40, 14MB40C, usted puede controlar los menús usando los botones en la parte delantera del televisor siguiendo las instrucciones en la pantalla.



### Paso 4: Programación de Canales

#### Programación Automática del Televisor

##### *Con excepción KV-14MB40, 14MB40C*

La función Guía de Programación Fácil le permitirá seleccionar el idioma de los menús y sintonizar automáticamente todos los canales que el televisor pueda recibir. (Mientras no lleve a cabo la AUTO PROGRAMACIÓN, la pantalla que muestra la Guía de Programación Fácil aparecerá cada vez que se encienda el televisor).

- Oprima POWER para encender el televisor.  
Aparecerá en pantalla la Guía de Programación Fácil.
- Oprima CH+ para que los menús aparezcan en Inglés o CH- para que aparezcan en español.
- Oprima VOL+ para continuar o VOL- para una demostración de las funciones y menús.

Para repetir Auto Ajuste  
Oprima SET UP en la parte delantera del televisor.

#### Programación Automática de los Canales (AUTO PROGRAMACIÓN)

La función de AUTO PROGRAMACIÓN le permite programar en un solo paso todos los canales que su televisor pueda recibir. Después podrá omitir los canales que no deseé incluir o añadir otros.

#### Notas

- Si el televisor está ajustado a una entrada de VIDEO, no podrá utilizar AUTO PROGRAMACIÓN. Oprima TV/VIDEO del control remoto hasta que aparezca un número de canal.
- Se recomienda programar los canales durante el día, cuando es mayor el número de canales que están transmitiendo.

- Oprima MENU.



- Coloque el cursor **▲** o **▼** en el menú de PREFERENCIAS  y oprima SELECT.
- Aparece el menú de PREFERENCIAS.

- Coloque el cursor **▲** o **▼** en AJUSTE DE CANAL y oprima SELECT.

- Coloque el cursor **▲** o **▼** en AUTO PROGRAMACIÓN y oprima SELECT.  
En la pantalla aparece AUTO PROGRAMACIÓN y el televisor empezará a buscar y programar los canales automáticamente.

#### Notas

- Si oprime cualquier botón del control remoto mientras AUTO PROGRAMACIÓN esté activada, esta función cesará.
- Al llevar cabo función AUTO PROGRAMACIÓN, se borrarán sus selecciones de FIJAR CANAL y ENCENDIDO/APAGADO.

#### Ajuste de Idioma de los Menús • Programación de Canales • Guía de Programación Fácil • Programación Automática de Canales

#### Para Omitir o Añadir Canales (OMITIR/AÑADIR)

Después de efectuar la AUTO PROGRAMACIÓN, podrá omitir los canales no deseados o añadir otros.

- Oprima MENU y seleccione el menú de PREFERENCIAS .
- Coloque el cursor en AJUSTE DE CANAL y oprima SELECT.
- Oprima **▲** o **▼** en OMITIR/AÑADIR CANAL y oprima SELECT.



#### 4 Para omitir o añadir un canal:

- Oprima CH+/- o del 0 al 9 para seleccionar el canal que desea.
- Oprima SELECT para seleccionar OMITIR o AÑADIR.

- Para omitir o añadir otros canales, repita el paso 4.

- Oprima MENU para volver al programa de televisión.

#### Nota

- Si quiere añadir un canal que no se captó con AUTO PROGRAMACIÓN, tendrá que usar los botones de 0 a 9 para añadirla.

#### Para Activar o Desactivar el Sistema de Cable (CABLE)

Si conecta su televisor a un sistema de cable, cambie la función CABLE a SI. Si utiliza una antena, cambie la función CABLE a NO para recibir canales de VHF/UHF.

- Oprima MENU.
- Coloque el cursor en el menú de PREFERENCIAS  y oprima SELECT.
- Coloque el cursor en AJUSTE DE CANAL y oprima SELECT.



- Coloque el cursor en CABLE y oprima SELECT.
- Oprima **▲** o **▼** para seleccionar SI o NO.
- Oprima SELECT.

- Oprima MENU para volver al programa de televisión.

Después de ajustar la función de CABLE necesita efectuar la AUTO PROGRAMACIÓN. (Consulte pág. 7).

#### Nota

- Si la imagen no aparece, es posible que el televisor esté ajustado a una entrada de video y no se pueda seleccionar CABLE. Oprima TV/VIDEO hasta que aparezca un número de canal y repita los pasos del 1 al 6.

#### Ajuste de Canal • Programación de Canales • Guía de Programación Fácil • Programación Automática de Canales

### Para ver Programas de Televisión

Oprima POWER para encender el televisor.

#### Nota

- Si la indicación VIDEO aparece en la pantalla, oprima TV/VIDEO para que aparezca un número de canal.

#### Selección Directa de Canales

Oprima los botones del 0 al 9 para seleccionar un canal.



El canal cambiará en 2 segundos, o puede oprimir ENTER después de haber seleccionado el canal para un cambio inmediato.

#### Exploración de Canales

Oprima CH +/- hasta que aparezca el canal que desea.

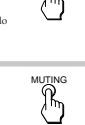


Nota

- Al mantener CH + o - oprimido, usted puede llegar rápidamente al canal deseado.

#### Cambio Rápido Entre dos Canales

Oprima JUMP.



Oprima este botón para alternar entre dos canales.

#### Nota

- Podrá cambiar rápidamente sólo a un canal que haya seleccionado con los botones del 0 al 9.

#### Eliminación del Sonido

Oprima MUTING.



En la pantalla aparece la indicación MUTING. Para restaurar el sonido, vuelva a oprimir MUTING u oprima VOL +.

#### Información en Pantalla

Utilice el botón DISPLAY para ver la hora actual, canal y función de sonido Multicanal (MTS).

#### 1 Oprima DISPLAY.

Aparecerán el número de canal y la hora actual (si está ajustada). También aparecerá la modalidad de sonido multicanal (MTS) que está en uso si se ha seleccionado un segundo programa de audio (SAP) o sonido estéreo (ESTEREO) (Solo KV-21SB40C, 21SB40M, 21SB40P, 21SE40, 21SE40C, 21SE40M, 21SE40P). La indicación MTS desaparecerá a los 4 segundos.

#### 2 Oprima DISPLAY una vez más.

CC1 (el ajuste de fábrica) aparecerá en la pantalla. Una versión escrita del diálogo aparecerá, si la emisora ofrece este servicio.

#### 3 Para desactivar CAPTION VISION, vuelva a oprimir DISPLAY hasta que aparezca la indicación DISPLAY OFF. DISPLAY OFF desaparecerá a los tres segundos.

#### Notas

- Consulte la página 12 para mayores informes sobre CAPTION VISION.
- Consulte la página 14 para mayores informes sobre MTS.

#### Para ver Videocintas

- Oprima TV/VIDEO hasta que aparezca la entrada de video que busca.



- Para ver la cinta, oprima PLAY en su videograbadora.

- Oprima TV/VIDEO para regresar a un programa de televisión.

#### Uso de Auriculares

Introduzca la clavija de los auriculares en el enchufe ubicado en la parte delantera del televisor. Al usar los auriculares, automáticamente se apagará el sonido de las bocinas del televisor.

#### Nota

- Si su televisor es monoaural, escuchará el sonido monoaural en ambos auriculares.

OMITIR/AÑADIR • CABLE • Para ver Programas de Televisión • Selección de Canales • JUMP • Eliminación del Sonido • Información en Pantalla • Videocintas • Auriculares

## Otras Funciones

### Apagado Automático (SLEEP)

La función SLEEP permite que el televisor esté encendido por el período de tiempo que usted indique y después se apague automáticamente.

- Oprima SLEEP hasta que aparezca el número de minutos que deseas. Un minuto antes de que el televisor se apague, aparecerá en la pantalla el mensaje SLEEP.
- Para cancelar el apagado automático, vuelve a oprimir SLEEP hasta que aparezca SLEEP OFF o apague el televisor.

#### Nota

- Si su televisor no recibe una señal en treinta minutos, se apagará automáticamente.



## Otras Funciones (continuación)

- Indique el día, hora, duración y canal deseados.

- Oprima SELECT hasta realizar el renglón correspondiente a los días.
- Oprima  $\Delta$  o  $\nabla$  para cambiar la opción del día. Cuando aparece el día deseado, oprima SELECT.
- Oprima SELECT hasta realizar la hora.
- Oprima  $\Delta$  o  $\nabla$  para indicar la hora deseada y oprima SELECT.
- Oprima  $\Delta$  o  $\nabla$  para indicar la duración deseada, hasta de seis horas, y oprima SELECT.
- Oprima  $\Delta$  o  $\nabla$  para indicar el canal deseado y oprima SELECT. Se encenderá el indicador del reloj en la parte delantera del televisor.

### Para borrar las indicaciones seleccionadas mediante ENCENDIDO/APAGADO

Oprima RESET mientras se encuentre en el menú de ENCENDIDO/APAGADO.

#### Nota

- Si se sale del menú de ENCENDIDO/APAGADO al estar programando esta función, quedarán registradas las indicaciones seleccionadas.

### Programación de CANAL FAVORITO

Esta función le dará rápido acceso a sus canales favoritos.

- Oprima MENU y seleccione el menú de PREFERENCIAS.
- Coloque el cursor en CANAL FAVORITO y oprima SELECT.



### Para usar BLOQUEAR CANAL

Esta función sirve para impedir que los niños vean determinados canales.

- Oprima MENU y seleccione el menú de PREFERENCIAS.
- Coloque el cursor en BLOQUEAR CANAL y oprima SELECT.



- Coloque el cursor para 1 o 2 y oprima SELECT.

- Oprima  $\Delta$  o  $\nabla$  para mostrar el canal que desea bloquear y oprima SELECT. Al escoger el canal que va a suprimir, la palabra BLOQUEADO aparecerá en la pantalla y se suprimirá CAPTION VISION.

Para cancelar las opciones seleccionadas bajo BLOQUEAR CANAL

Oprima RESET mientras se encuentre en el menú de BLOQUEAR CANAL.

### Para seleccionar una Opción de CAPTION VISION

Algunos programas son transmitidos con subtítulos conocidos como CAPTION VISION. Estos servicios son limitados a específicas emisoras y es posible que no estén disponibles en su área. (El ajuste de fábrica es CCI).

- Oprima MENU y seleccione el menú de PREFERENCIAS.
- Coloque el cursor en CAPTION VISION y oprima SELECT.
- Oprima  $\Delta$  o  $\nabla$  y programar su televisor a una de las siguientes opciones:



- |                                  |   |
|----------------------------------|---|
| Elija                            | Para mostrar  |
| CCI, 2, 3 o 4                    | Un versión escrita del diálogo o los efectos de sonido de un programa. (El ajuste de fábrica es CCI). |
| TEXT 1, 2, 3 o 4                 | Información de emisora/estación que no está relacionado con el programa.                              |
| XDS (Servicio ampliado de datos) | Un tipo de programa, nombre, duración y siglas de canal.  |

### 4 Oprima DISPLAY.

Los subtítulos aparecerán, si la emisora ofrece este servicio.

- Para desactivar CAPTION VISION, oprima DISPLAY hasta que aparezca DISPLAY OFF.

#### Notas

- La información escrita desaparecerá durante unos segundos si oprime el botón MUTING.
- La información escrita podrá aparecer con un cuadro blanco u otros errores si la recepción del canal es deficiente.

## Uso del Menú de VIDEO

### Ajustes de la imagen (VIDEO)

Puede cambiar el contraste, brillo, color, tinte y nitidez de la imagen.

- Oprima MENU y seleccione el menú de VIDEO.



- Oprima  $\Delta$  o  $\nabla$  para seleccionar la función que desea ajustar y oprima SELECT.

Consulte la tabla DESCRIPCIÓN DE FUNCIONES para una explicación de los ajustes que se pueden hacer.

### DESCRIPCIÓN DE FUNCIONES

Funcióñ	Oprima $\Delta$	Oprima $\nabla$
CONTRASTE	Aumentar el contraste	Disminuir el contraste
BRILLO	Aumentar el brillo de la imagen	Disminuir el brillo de la imagen
COLOR	Aumentar el nivel de los colores	Disminuir el nivel de los colores
TINTE	Aumentar los tonos verdes	Disminuir los tonos verdes
NITIDEZ	Aumentar la nitidez de la imagen	Suavizar la imagen

- Oprima MENU para volver al programa de televisión.

### Para reestablecer los niveles de video originales

Oprima RESET, cuando se encuentre en el menú de VIDEO.

## Uso del Menú de AUDIO

### Selección de Programas Estereofónicos o Bilingües (MTS)

Solo KV-21SB40C, 21SB40M, 21SB40P, 21SE40, 21SE40C

La función de Sonido Multicanal (MTS) permite disfrutar de sonido estereofónico (ESTEREO), un Segundo Programa de Audio (SAP) o de Sonido Monaural, (MONO), cuando existe.

- 1 Oprima MENU y seleccione el menú AUDIO ↴ .
- 2 Oprima ▲ o ▼ en MTS y oprima SELECT.



- 3 Oprima ▲ o ▼ para seleccionar ESTEREO, SAP, o MONO y oprima SELECT.

Elija	Para
ESTEREO	Escuchar sonido estereofónico.
SAP	Escuchar programas bilingües y afines.
MONO	Reducir el ruido durante transmisiones estereofónicas deficientes.

### Acceso directo a MTS

Oprima MTS en su control remoto para recorrer las opciones MTS.

#### Nota

- Si el televisor no tiene audio, puede ser la función SAP este seleccionada.

Confirme la selección de AUDIO.

## Solución de Problemas

En caso de un problema con su televisor, siga estas recomendaciones. Si el problema persiste, comuníquese con el concesionario Sony más cercano.

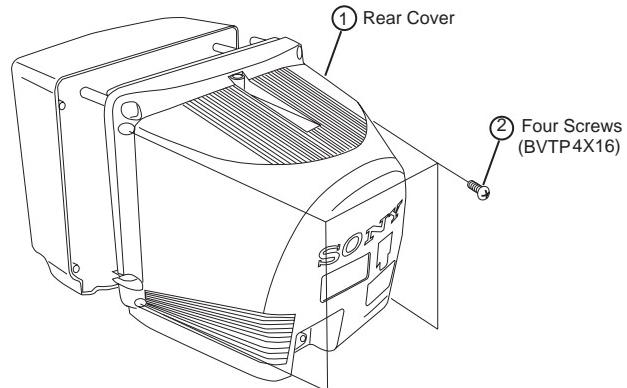
Problema	Sugerencia
Ausencia de Imagen y sonido	<ul style="list-style-type: none"> <li>• Asegúrese de que el cable eléctrico esté bien conectado.</li> <li>• Si la luz roja en la parte delantera del televisor centellea, llame al centro de servicio.</li> <li>• Compruebe si el ajuste TV/VIDEO es correcto: TV para ver la televisión y VIDEO para cintas de video (página 9).</li> <li>• Coloque las pilas del control remoto en la posición correcta.</li> <li>• Pruebe otro canal. Es posible que el problema se deba a la emisora.</li> </ul>
Imagen defectuosa o ausencia de imagen, pero sonido adecuado	<ul style="list-style-type: none"> <li>• Ajuste CONTRASTE en el menú VIDEO (pág. 13).</li> <li>• Ajuste BRILLO en el menú VIDEO (pág. 13).</li> <li>• Revise las conexiones de la antena o del cable (pág. 3).</li> </ul>
Buena imagen, pero ausencia de sonido	<ul style="list-style-type: none"> <li>• Oprima MUTING para que la palabra MUTING desaparezca de la pantalla (pág. 9).</li> <li>• Compruebe que el ajuste de AUDIO. Es posible que el función de SAP ha sido seleccionada. (pág. 14).</li> </ul>
Ausencia de color	<ul style="list-style-type: none"> <li>• Ajuste la opción COLOR del menú VIDEO (pág. 13).</li> <li>• Compruebe que no se trata de un programa en blanco y negro.</li> </ul>
Si aparece sólo nieve en la pantalla	<ul style="list-style-type: none"> <li>• Compruebe la función CABLE en el menú de PREFERENCIAS (pág. 8).</li> <li>• Revise las conexiones de la antena o del cable (pág. 3).</li> <li>• Compruebe si el canal está transmitiendo.</li> </ul>
Líneas punteadas o rayas	<ul style="list-style-type: none"> <li>• Ajuste la posición de la antena.</li> <li>• Mantenga el televisor alejado de otros aparatos electrónicos. Algunos aparatos electrónicos provocan ruidos eléctricos que pueden interferir con la recepción del televisor.</li> </ul>
Imágenes dobles o "fantasma"	<ul style="list-style-type: none"> <li>• Compruebe su antena área o comuníquese con su proveedor del cable.</li> </ul>
No se reciben los canales UHF utilizando una antena	<ul style="list-style-type: none"> <li>• Compruebe si la función CABLE del menú de PREFERENCIAS está en NO (pág. 8).</li> <li>• Use AUTO PROGRAMACIÓN para añadir los canales que no estén en la memoria del televisor (pág. 7).</li> </ul>
No se reciben los canales de cable	<ul style="list-style-type: none"> <li>• Compruebe si la opción CABLE del menú de PREFERENCIAS está en SI (pág. 8).</li> <li>• Use AUTO PROGRAMACIÓN para añadir los canales que no estén en la memoria del televisor (pág. 7).</li> </ul>
El control remoto no funciona	<ul style="list-style-type: none"> <li>• Las pilas pueden estar descargadas; cámbielas (pág. 5).</li> </ul>
El televisor necesita una limpieza	<ul style="list-style-type: none"> <li>• Limpie el televisor con un paño suave y seco. No utilice solventes fuertes como adelgazador de pintura o bencina, que pueden dañar el acabado del mueble.</li> </ul>
No se puede cambiar el canal	<ul style="list-style-type: none"> <li>• Desactive la función FIJAR CANAL (página 11).</li> <li>• Utilice AUTO PROGRAMACIÓN para añadir canales que no se encuentren en la memoria del televisor (página 7).</li> </ul>

KV-[13M40/50/51], KV-[14MB40/40C/40A], KV-[20M40/S40/S41/V80], KV-[21SE40/40A/40C/80/80A/80C],  
KV-[21MB40C/40M/40P], KV-[21ME40/40P], KV-[21SB40/40M/40P], KV-21XT4A

## SECTION 2 DISASSEMBLY

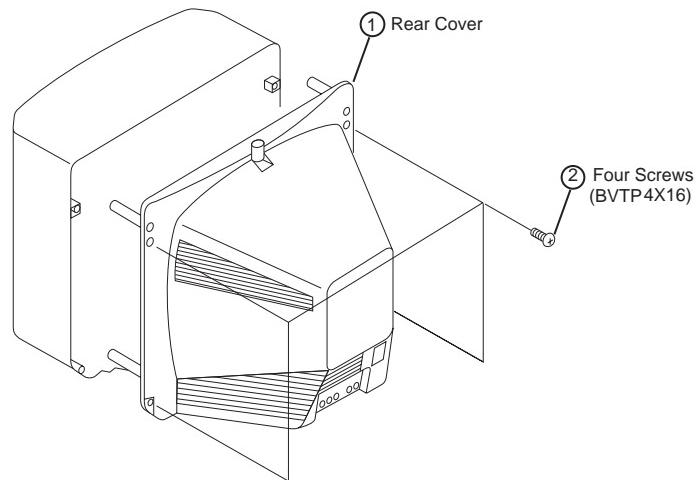
### 2-1-1. REAR COVER REMOVAL

(KV-13M40/13M50/13M51/14MB40/14MB40A/14MB40C)



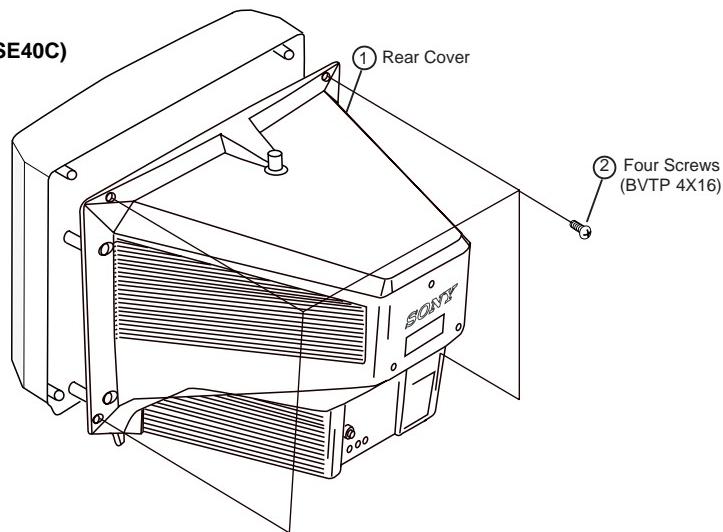
### 2-1-2. REAR COVER REMOVAL

(KV-20M40/20S40/20S41/21MB40C/21MB40M/21MB40P/21SB40C/21SB40M/21SB40P/21XT4A)



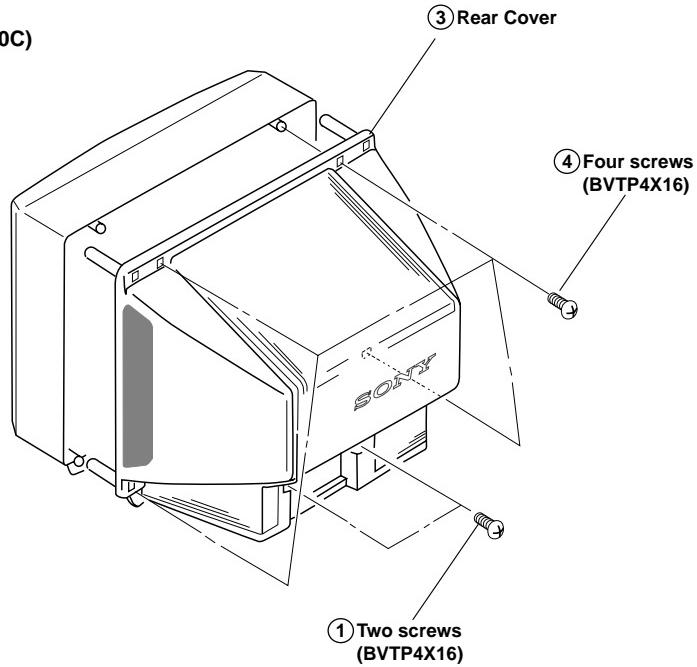
### 2-1-3. REAR COVER REMOVAL

(KV-21ME40/21ME40C/21SE40/21SE40A/21SE40C)

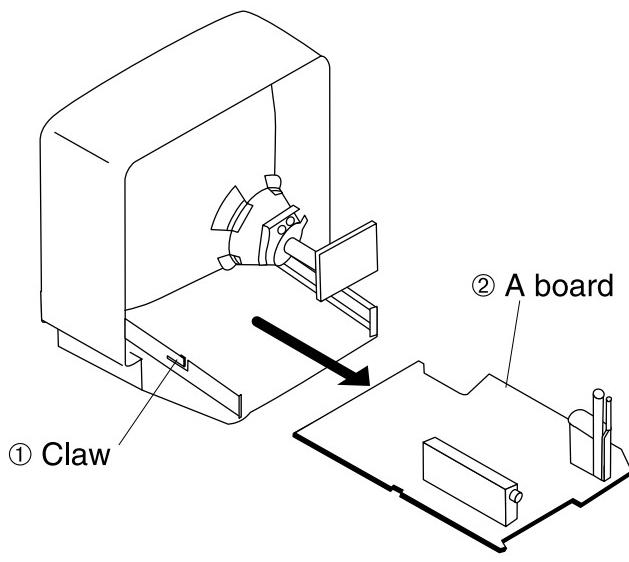


## 2-1-4. REAR COVER REMOVAL

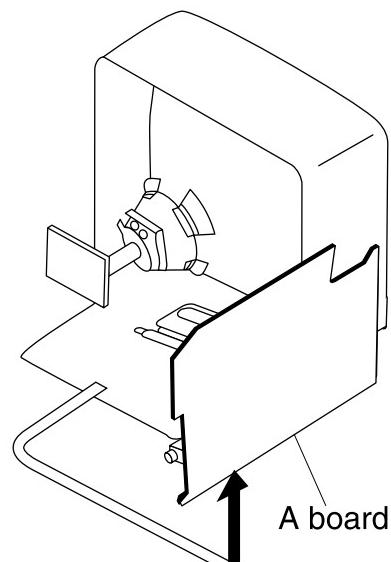
(KV-20V80/21SE80/21SE80A/21SE80C)



## 2-2. A BOARD REMOVAL (FOR ALL MODELS)



## 2-3. SERVICE POSITION (FOR ALL MODELS)



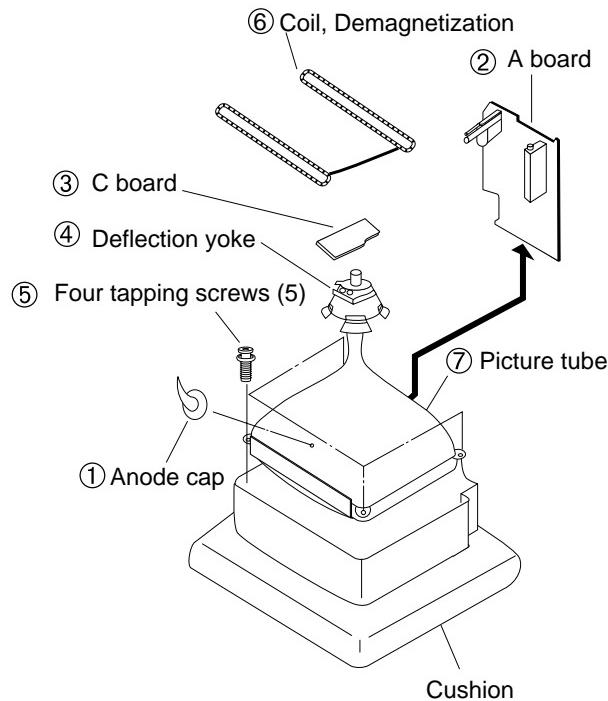
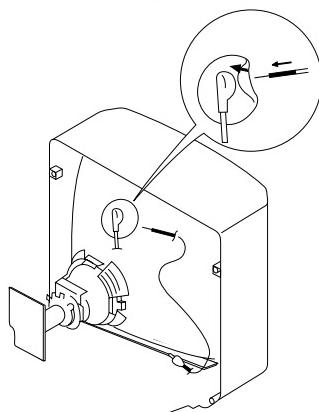
## 2-4-1. PICTURE TUBE REMOVAL (KV-13M40/13M50/13M51/14MB40/14MB40C/14MB40A)

### **WARNING**

#### **Before removing anode cap:**

H.V. remains in the CRT even after the power is disconnected.

To avoid electrical shock, discharge CRT before attempting to remove the anode cap : Short between anode and CRT mounting bracket.



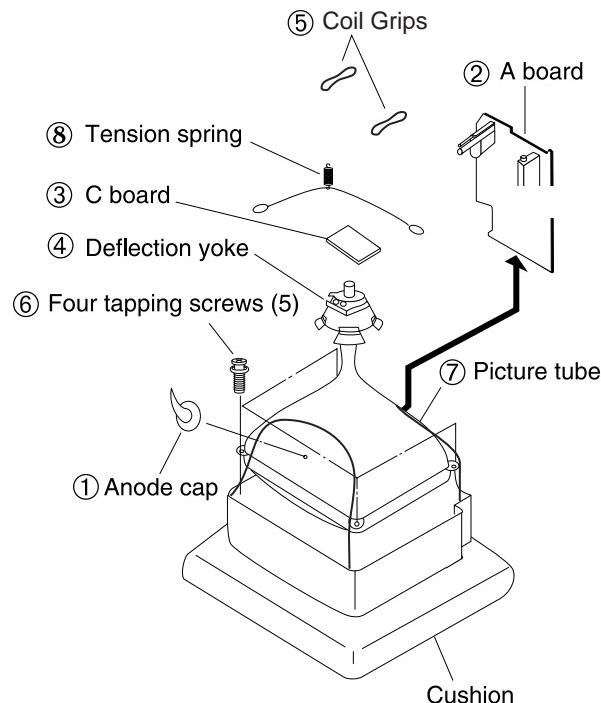
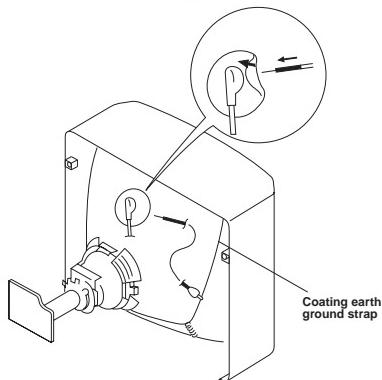
## 2-4-2. PICTURE TUBE REMOVAL (KV-20M40/20S40/20S41/21MB40C/21MB40M/21ME40/21ME40C/21SB40C/ 21SB40M/21SB40P/21SE40/21SE40A/21SE40C/21MB40P/21XT4A)

### **WARNING**

#### **Before removing anode cap:**

H.V. remains in the CRT even after the power is disconnected.

To avoid electrical shock, discharge CRT before attempting to remove the anode cap : Short between anode and CRT coating earth ground strap.



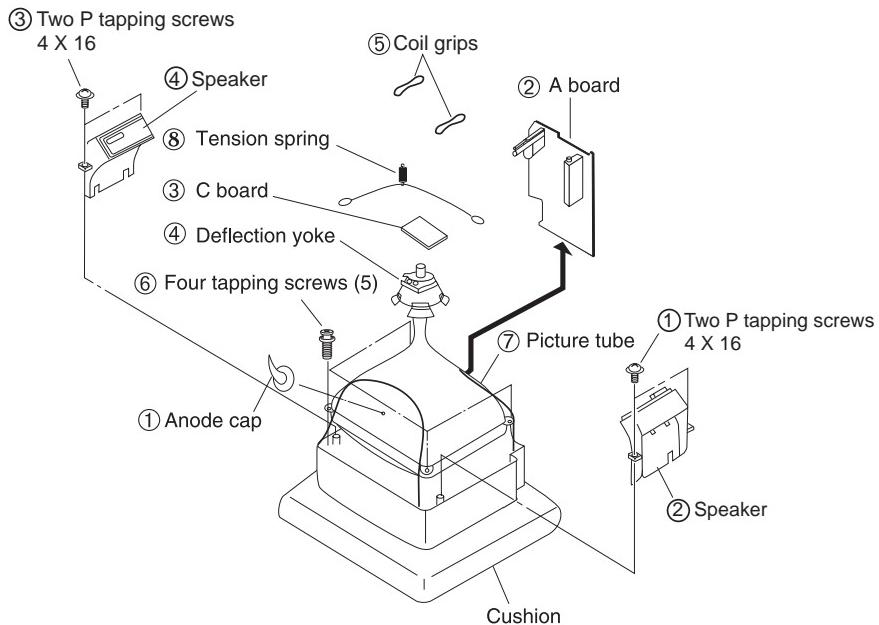
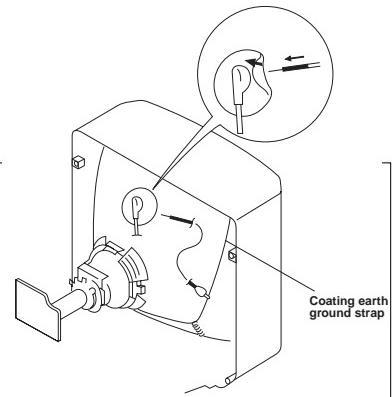
### 2-4-3. PICTURE TUBE REMOVAL (KV-20V80/21SE80C/21SE80/21SE80A)

#### WARNING

#### Before removing anode cap:

H.V. remains in the CRT even after the power is disconnected.

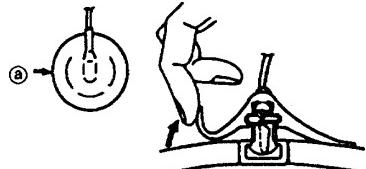
To avoid electrical shock, discharge CRT before attempting to remove the anode cap : Short between anode and CRT coating earth ground strap.



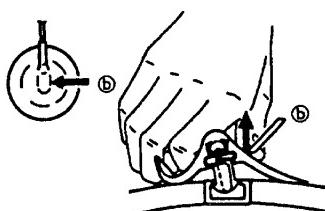
#### • REMOVAL OF THE ANODE-CAP

NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

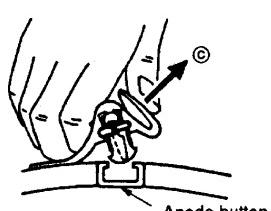
#### • REMOVAL PROCEDURES



- ① Turn up one side of the rubber cap in the direction indicated by arrow ④.



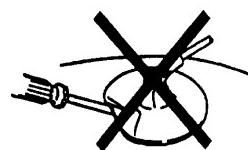
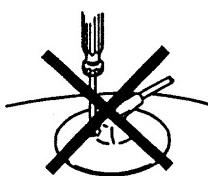
- ② Use your thumb to pull the rubber cap firmly in the direction indicated by arrow ⑤.



- ③ When one side of the rubber cap separates from the anode button, the anode-cap can be removed by turning the rubber cap and pulling it in the direction of arrow ⑥.

#### • HOW TO HANDLE AN ANODE-CAP

- ① Do not use sharp objects which may cause damage to the surface of the anode-cap.
- ② Do not squeeze the rubber covering too hard to avoid damaging the anode-cap. A material fitting called a shatter-hook terminal is built into the rubber.
- ③ Do not force turn the foot of the rubber cover. This may cause the shatter-hook terminal to protrude and damage the rubber.



## SECTION 3 SET-UP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed. These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switch should be set as follows unless otherwise noted:

PICTURE control ..... normal

BRIGHTNESS control ..... normal

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G2) and White Balance

**Note:** Test Equipment Required

1. Color Bar Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital Multimeter

### 3-1. BEAM LANDING

#### Preparation:

- Feed in the white pattern signal.
- Before starting, degauss the entire screen.

1. Input a raster signal with the pattern generator.
2. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Fig.2.
3. Turn the raster signal of the pattern generator to green.
4. Move the deflection yoke backward, and adjust with the purity control so that green is in the center and red and blue are at the sides evenly. (Fig.3)
5. Move the deflection yoke forward, and adjust so that the entire screen becomes green. (Fig.1)
6. Switch over the raster signal to red and blue and confirm the condition.
7. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw.
8. When landing at the corner is not right, adjust by using the disk magnets. (Fig.4)

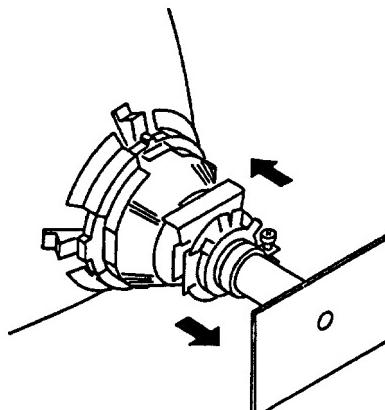


Fig. 1

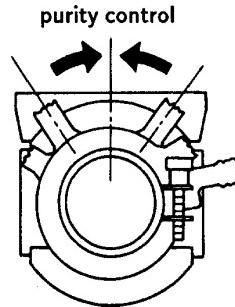


Fig. 2

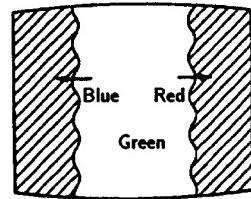


Fig. 3

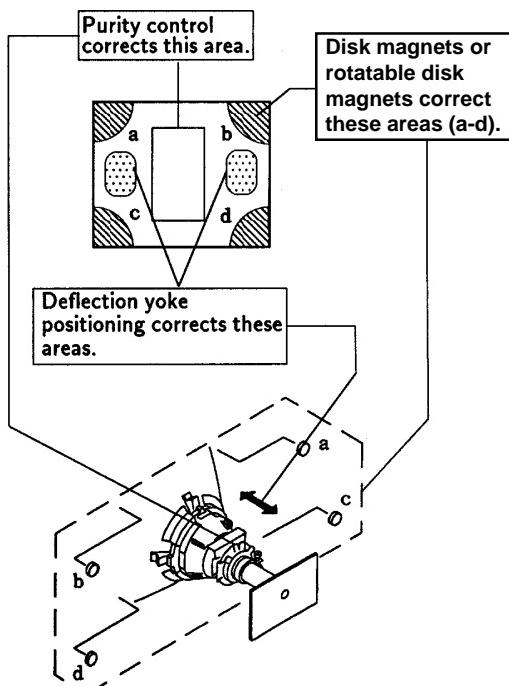


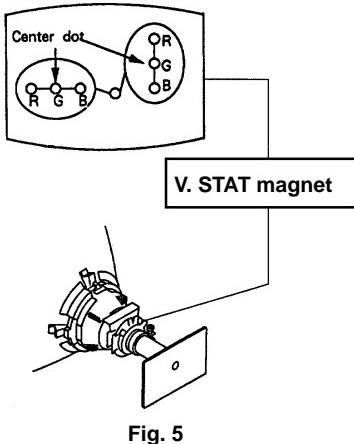
Fig. 4

### 3-2. CONVERGENCE

#### Preparation:

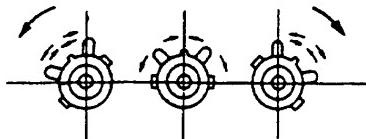
- Before starting, perform FOCUS, V. LIN and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in dot pattern.

#### (1) Vertical Static Convergence

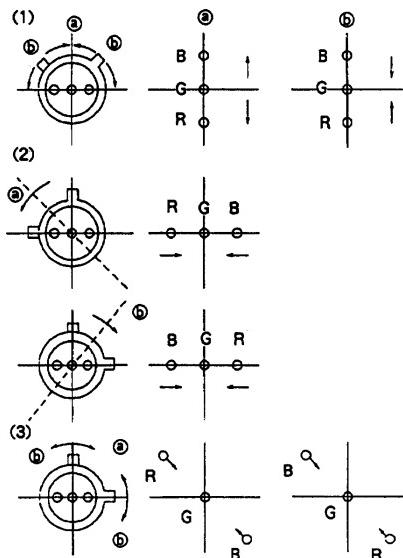


- Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)

Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



- When the V. STAT magnet is moved in the direction of arrow ① and ②, red, green, and blue dots move as shown below:



If the blue dot does not converge with red and green dots, perform the following steps:

- Move BMC magnet (a) to correct insufficient H. Static convergence.
- Rotate BMC magnet (b) to correct insufficient V. Static convergence.

In either case, repeat Beam Landing Adjustment.

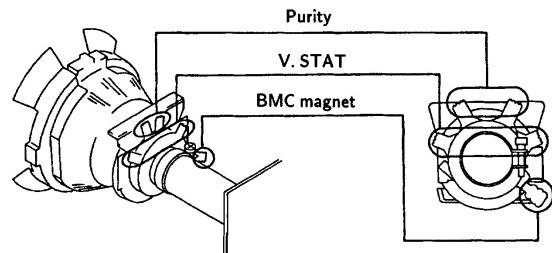
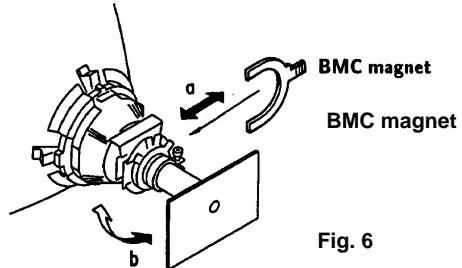


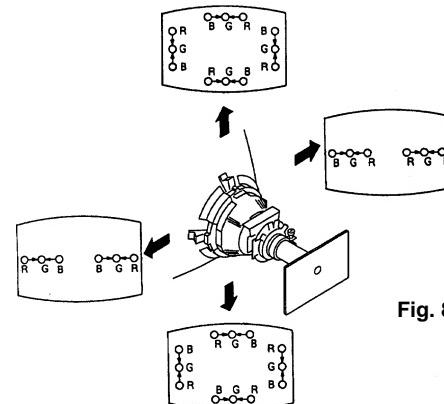
Fig. 7

#### (2) Dynamic Convergence Adjustment

#### Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

- Slightly loosen deflection yoke screw.
- Remove deflection yoke spacers.
- Move the deflection yoke for best convergence as shown below. (Fig. 8)
- Tighten the deflection yoke screw.
- Install the deflection yoke spacers.



### (3) Screen-corner Convergence

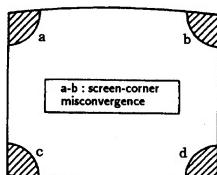
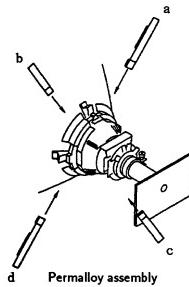


Fig. 9



Affix a permalloy assembly corresponding to the misconverged areas:



### 3-3. FOCUS

1. Adjust FOCUS control (RV752 on C-board) for best picture for 13" and 14".

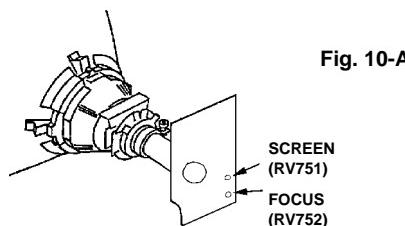


Fig. 10-A

2. Adjust FOCUS control for best picture for 20" and 21".

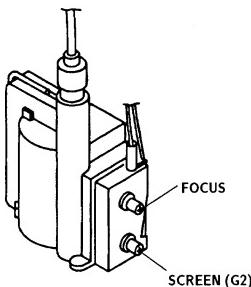


Fig. 10-B

### 3-4. SCREEN (G2)

1. Input a dots pattern.
2. Set the PICTURE and BRIGHT controls at minimum and COLOR control at normal.
3. Adjust SBRT, GCUT, BCUT in service mode with an oscilloscope as shown in Fig. 11 so that voltages on the red, green, and blue cathodes are: 170Vdc (for 20" and 21") and 150Vdc (for 13" and 14").

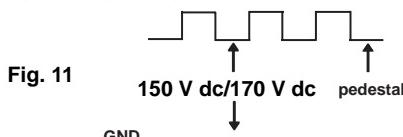


Fig. 11

4. Observe the screen and adjust:

SCREEN (G2) VR (for 20" and 21")  
 SCREEN (G2) RV751 (for 13" and 14")

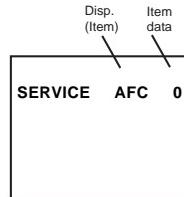
to obtain the faintly visible background of dot signal.

### 3-5. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

#### (1) SERVICE MODE PROCEDURE

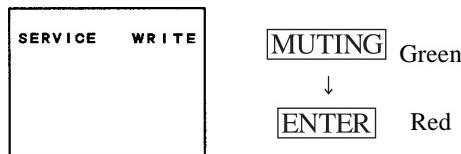
1. Standby mode. (Power off)
2. **[DISPLAY] → [5] → [VOL (+)] → [POWER]** on the Remote Commander. (Press each button within a second.)

#### (2) SERVICE ADJUSTMENT MODE IN



3. The CRT displays the item being adjusted.
4. Press **[1]** or **[4]** on the Remote Commander to select the item.
5. Press **[3]** or **[6]** on the Remote Commander to change the data.
6. Press **MUTING** then **ENTER** to write into memory.

#### (3) SERVICE ADJUSTMENT MODE MEMORY



7. Turn set off and on to exit.

### 3-6. WHITE BALANCE ADJUSTMENTS

1. Input an entire white signal.
2. Set to Service adjustment Mode.
3. Set DCOL to "0"
4. Set the PICTURE and BRIGHT to minimum.
5. Adjust with SBRT if necessary.
6. Select GCUT and BCUT with **[1]** and **[4]**.
7. Adjust with **[3]** and **[6]** for the best white balance.
8. Set the PICTURE and BRIGHT to maximum.
9. Select GDRV and BDRV with **[1]** and **[4]**.
10. Adjust with **[3]** and **[6]** for the best white balance.
11. Reset DCOL to "1".
12. Write into the memory by pressing **MUTING** then **ENTER**.

## SECTION 4 SAFETY RELATED ADJUSTMENTS

### A BOARD

#### **R582 CONFIRMATION METHOD (HV HOLD-DOWN CONFIRMATION) AND READJUSTMENTS**

The following adjustments should always be performed when replacing the following components which are marked with **█** on the schematic diagram:

IC301, IC521, IC602, D572, D573, D574, DY,  
 C507, C511, C574, C575, R578, R582, R583, R584,  
 R585, R586, R625, R626, R634, R635, T504 (FBT)

#### **(1) Preparation before Confirmation**

- 1) Turn the POWER switch ON. Input an entirely white signal and set the PICTURE and BRIGHT controls to maximum.
- 2) Confirm that the voltage between C574(+) and ground is more than:  
     99.8VDC (for 20"/21")  
     95.0VDC (for 13"/14")  
     when the set is operating normally with  $120.0 \pm 2.0$  VAC, (or  $220.0 \pm 2.0$  VAC supply for KV-14MB40C/40A, 21ME40C, 21MB40C, 21SE40C/40A/80C/80A, 21SB40C and 21XT4A only).

#### **(2) Hold-down Operation Confirmation**

- 1) Connect the current meter between Pin 11 of the FBT (T504) and the PCB land where Pin 11 would normally attach.
- 2) Input a dot signal and set PICTURE and BRIGHTNESS to minimum:  
 $IABL = 95+100/-95\mu A$  (for 20"/21")  
 $40+100/-40\mu A$  (for 13"/14")
- 3) Confirm the voltage of A board TP-600 is  
 $116.8 \pm 0.3$  VDC (for 20"/21")  
 $117.0 \pm 0.3$  VDC (for 13"/14")
- 4) Connect the Digital Voltmeter and the DC power supply via diode 1SS119 to C574 (+). (See figure 1.0 on next page.)
- 5) Increase the DC power voltage gradually until the picture blanks out.
- 6) Read the digital voltmeter indication.
- 7) Turn DC power source off immediately.  
**STANDARD**  
 Less than or equal to:      127.3 VDC (for 20"/21")  
 $117.75$  VDC (for 13"/14")

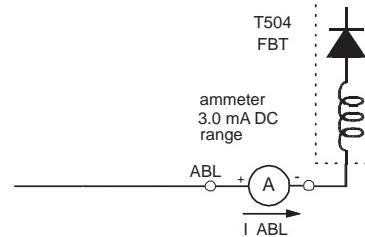
- 9) Repeat steps from (4) to (7).

#### **STANDARD**

Less than or equal to:      127.3 VDC (for 20"/21")  
 $117.75$  VDC (for 13"/14")

#### **(3) Hold-down Readjustment**

If the current setting indicated in step 2-2 cannot be met, readjustment should be performed by altering the resistance value of R582, a component marked with **█**.



#### **B+ VOLTAGE CONFIRMATION AND ADJUSTMENT**

The following adjustments should always be performed when replacing the following components which are marked with **█** on the schematic diagram:

IC001, IC602, R030, R624, R626, R632, R633, R635, R636, R637, R638, R639

- 1) Supply  $130 \pm 2.0$  VAC (or  $220.0 \pm 2.0$  VAC supply for KV-14MB40C/40A, 21ME40C, 21MB40C, 21SE40C/40A/80C/80A, 21SB40C and 21XT4A only) to the set with a variable auto transformer.
- 2) Input a dot signal.
- 3) Set the PICTURE control and the BRIGHT control to minimum condition.
- 4) Set to service adjustment mode.
- 5) Select PADJ with **[1]** and **[4]**.
- 6) Adjust with **[6]** to the 0 level.
- 7) Confirm the voltage of A BOARD TP-600 is less than 125V DC.
- 8) If step 7 is not satisfied, replace the components, repeat the above steps.
- 9) Supply  $120.0 \pm 2.0$  VAC (or  $220.0 \pm 2.0$  VAC supply for KV-14MB40C/40A, 21ME40C, 21MB40C, 21SE40C/40A/80C/80A, 21SB40C and 21XT4A only) to the set with a variable auto transformer.
- 10) Adjust with **[3]** and **[6]** for:       $116.8 \pm 0.3$  V DC (for 20"/21")  
 $117.0 \pm 0.3$  V DC (for 13"/14")
- 11) Write into the memory by pressing **MUTING** then **ENTER**.

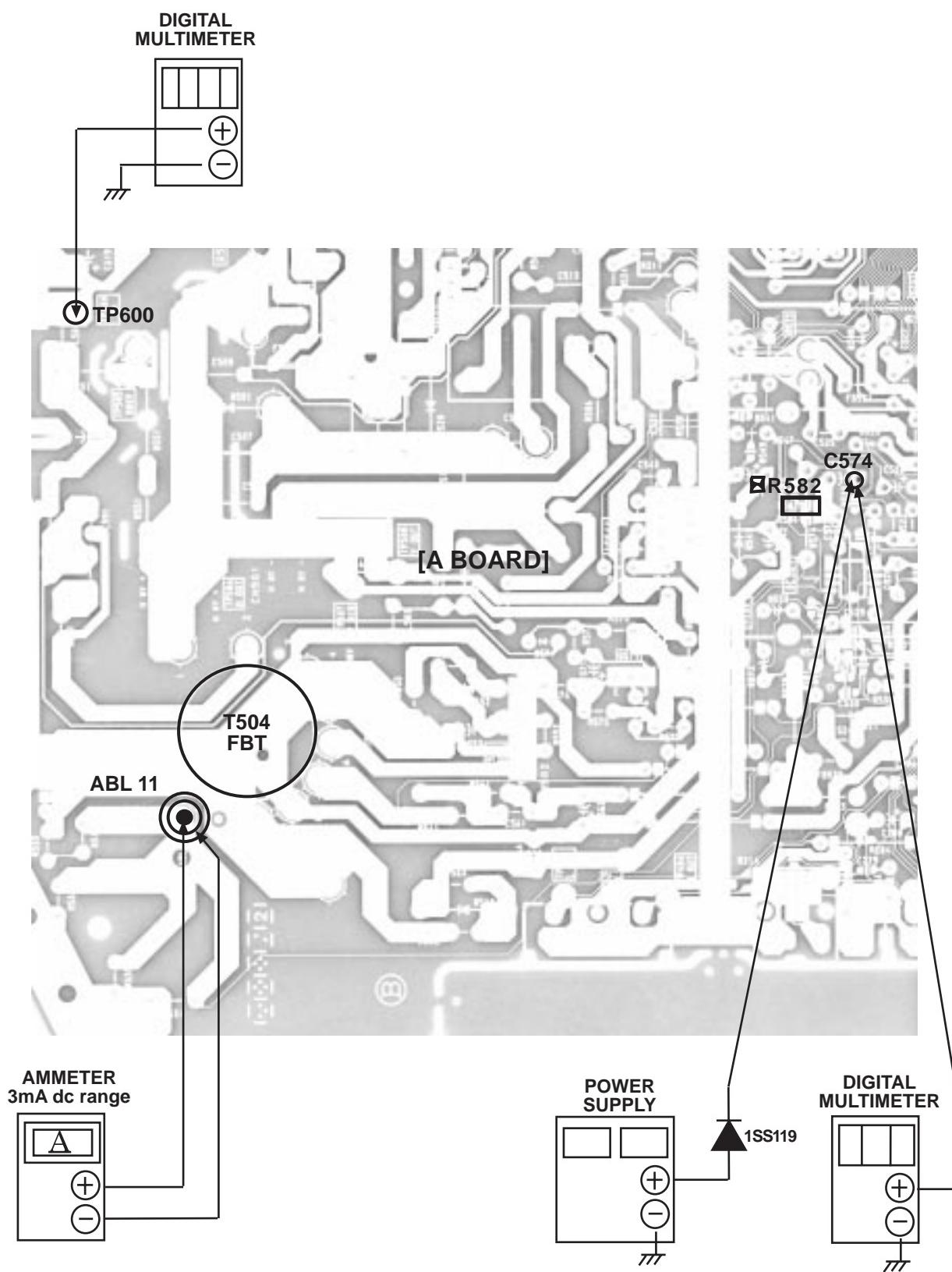


Figure 1.0

## SECTION 5 CIRCUIT ADJUSTMENTS

### 5-1. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

Use Remote Commander (RM-Y155) to perform circuit adjustments on this model.

NOTE : Test Equipment Required.  
 1. Pattern Generator  
 2. Frequency Counter  
 3. Digital Multimeter  
 4. Audio OSC

- Press [8] then [ENTER] on the Remote Commander to initialize.



Carry out step 7 when adjusting IDs 0 to 4 and when replacing and adjusting IC003.

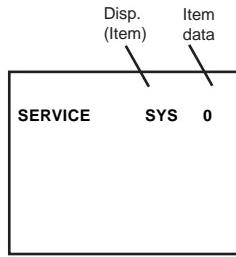
#### (1) Method of Setting the Service Adjustment Mode

##### SERVICE MODE PROCEDURE

- Standby mode. (Power off)
- [DISPLAY] → [5] → [VOL(+)] → [POWER] on the Remote Commander. (Press each button within a second.)

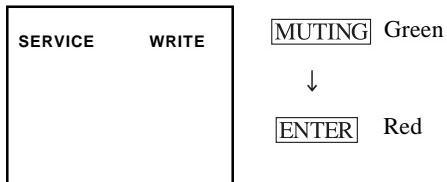
- Turn set off and on to exit.

##### SERVICE ADJUSTMENT MODE IN



- The CRT displays the item being adjusted.
- Press [1] or [4] on the Remote Commander to select the item.
- Press [3] or [6] on the Remote Commander to change the data.
- Press [MUTING] then [ENTER] to write into memory.

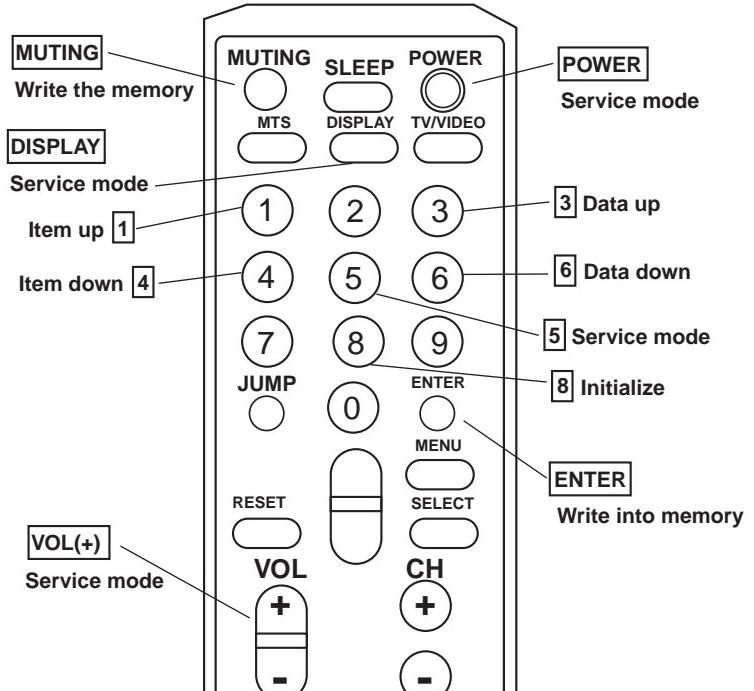
##### SERVICE ADJUSTMENT MODE MEMORY



#### (2) Memory Write Confirmation Method

- After adjustment, pull out the plug from the AC outlet, then replace the plug in the AC outlet again.
- Turn the power switch ON and set to service mode.
- Call the adjusted items again to confirm they were adjusted.

#### (3) Adjust Buttons and Indicator



RM-Y155

#### (4) Item of Adjustments

NO.	ITEM	FUNCTION	DATA RANGE	INITIAL DATA				AVERAGE DATA
				NTSC	PAL-M	PAL-N	VIDEO	
1	HSIZ	HORIZONTAL AMP. ADJ.	0 - 6 3	3 1	3 1	3 1		3 1
2	HPOS	HORIZONTAL POS. ADJ.	0 - 6 3	2 1	2 1	1 9		2 8
3	VBOW	VRT LINE BOWING ADJ.	0 - 1 5		6			8
4	VANG	VRT LINE BOW SLANT ADJ.	0 - 1 5		6			1 0
5	TRAP	HORIZ. TRAPEZOID ADJ.	0 - 1 5		1 5			1 5
6	PAMP	HORIZ. PIN DISTORTION ADJ.	0 - 6 3	3 1	3 1	3 1		3 1
7	CPIN	SAME AS PAMP-SCRN TP/BTM	0 - 6 3	3 1	3 1	3 1		3 1
8	VSIZ	VERTICAL AMP. ADJUST	0 - 6 3	4 3	4 3	4 7		4 4
9	VPOS	VERTICAL POSITION ADJ.	0 - 6 3	3 5	3 5	2 8		3 3
10	VLIN	VERTICAL LINEARITY ADJ.	0 - 1 5	7	7	7		5
11	SCOR	VERTICAL AMOUNT ADJ.	0 - 1 5	7	7	7		9
12	VZOM	16:9 CRT Z MODE ON/OFF	0, 1		0			0
13	EHT	VRT HI-VOLT. CORRECTION	0 - 1 5		1 5			1 5
14	ASP	ASPECT RATIO CONTROL	0 - 6 3		4 7			4 7
15	SCRL	16:9 CRT Z MODE TRAN SCRL	0 - 6 3		3 1			3 1
16	HBLK	RGB OUT WIDTH CONTROL	0, 1		1			1
17	LBLK	LEFT SCREEN HBLK CONTROL	0 - 1 5		1 5			1 5
18	RBLK	RGT SCREEN HBLK CONTROL	0 - 1 5		3			3
19	VUSN	V SAW WAVEFORM COMPRES	0, 1		0			0
20	HDW	H. DRIVE PULSE WIDTH	0, 1		0			0
21	EWDC	EW/DC ADJUST	0, 1		0			0
22	LVLN	SCREEN BTM VRT LIN ADJUST	0 - 1 5		0			0
23	UVLN	SCREEN TOP VRT LIN ADJUST	0 - 1 5		0			0
24	RDRV	R OUTPUT DRIVE CONTROL	0 - 6 3		3 0			3 2
25	GDRV	G OUTPUT DRIVE CONTROL	0 - 6 3		2 4			2 8
26	BDRV	B OUTPUT DRIVE CONTROL	0 - 6 3		2 1			2 5
27	RCUT	R OUTPUT CUTOFF CONTROL	0 - 1 5		1 5			7
28	GCUT	G OUTPUT CUTOFF CONTROL	0 - 1 5		7			5
29	BCUT	B OUTPUT CUTOFF CONTROL	0 - 1 5		7			6
30	DCOL	DYNAMIC COLOR ON/OFF	0, 1		0			1
31	SHUE	SUB HUE	0 - 3 1		1 5			1 5
32	SCOL	SUB COLOR	0 - 3 1	1 4	1 4	1 4		1 5
33	SBRT	SUB BRIGHTNESS	0 - 3 1		7			5
34	RON	R OUTPUT ON/OFF	0, 1		1			1
35	GON	G OUTPUT ON/OFF	0, 1		1			1
36	BON	B OUTPUT ON/OFF	0, 1		1			1
37	AXPL	AXIS PAL	0, 1		0			0
38	AXNT	AXIS NTSC	0, 1		0			0
39	CBPF	CHROMA BPF ON/OFF	0, 1		1			1
40	CTR	Y TRAP FILTER ON/OFF	0, 1	0,1:combfilter models				0
41	COFF	COLOR ON/OFF	0, 1		0			0
42	KOFF	SET COLOR KILLER	0, 1		0			0
43	SSH	SUB SHARPNESS	0 - 1 5		1 0			1 0
44	SHPF	SHARPNESS CIRCUIT F0	0, 1		1		1	1
45	PREL	PRE/OVR SHOOT SWITCHING	0, 1		0			0
46	Y-DC	DC TRANS RATIO SWITCHING	0, 1		1			1
47	GAMM	GAMMA CORRECTION AMNT	0 - 3		0			0
48	ABLM	ABL MODE SWITCHING	0, 1		1			1
49	VTH	ABL C D VTH SWITCHING	0, 1		1			1
50	YDEL	Y DELAY TIME CONTROL	0 - 1 5		7			7
51	NCOL	NO COLOR ID	0, 1		1			1
52	FSC	FSC OUT ON/OFF	0, 1	'1' for V series, '0' for S,M & trinorma				0
53	K-ID	KILLER ID CONTROL SW	0, 1		0			0
54	HOSC	H VCO OSCILLATION FREQ	0 - 1 5		1 0			1 0
55	VSS	V SYNC SLICE LEVEL	0, 1		0			0
56	HSS	H SYNC SLICE LEVEL	0, 1		0			0
57	HMSK		0, 1		1			1
58	VTMS	SELECT SIGNAL VTIM PIN	0 - 3		0			0
59	CDMD	V CNT DWN MODE SWITCHING	0 - 3		0		1	1
60	AFC	AFC LOOP GAIN SWITCHING	0 - 3		0		0	0
61	FIFR	FIELD FREQUENCY	0 - 3	'3' for NTSC models, '1' for trinorma				3
62	SBAL	SUB BALANCE	0 - 1 5		1 3			1 3
63	DISP	OSD POSITION	0 - 1 2 7		1 5			1 5
64	PADJ	POWER ADJUSTMENT	0 - 6 3		5 1			4 7

SERVICE ID0 25

Note: No. 1 through 64 show adjustment order.

## (5) Feature ID Map

		KV-	DESTINATION	ID-0	ID-1	ID-2	ID-3	ID-4	ID-5
1	<b>13M40</b>	(U)	25	1	0	3	19	0	
2	<b>13M40</b>	(CND)	9	1	0	3	19	0	
3	<b>14MB40</b>	(E)	25	1	0	3	51	1	
4	<b>14MB40C</b>	(E)	25	1	0	3	51	1	
5	<b>14MB40A</b>	(E)	31	3	0	3	51	1	
6	<b>20M40</b>	(CND)	9	3	0	131	23	1	
7	<b>20M40</b>	(U)	25	3	0	131	23	1	
8	<b>21MB40P</b>	(E)	25	3	0	195	55	1	
9	<b>21MB40M</b>	(MX)	25	3	0	195	55	1	
10	<b>21MB40C</b>	(E)	25	3	0	195	55	1	
11	<b>21SE40</b>	(E)	25	3	1	195	55	1	
12	<b>20S40</b>	(CND)	9	3	1	131	23	1	
13	<b>20S41</b>	(U)	25	3	1	131	23	1	
14	<b>20S41</b>	(CND)	9	3	1	131	23	1	
15	<b>20S40</b>	(U)	25	3	1	131	23	1	
16	<b>21SE40C</b>	(E)	25	3	1	195	55	1	
17	<b>20V80</b>	(U)	25	19	13	131	31	1	
18	<b>20V80</b>	(CND)	9	19	13	131	31	1	
19	<b>21SE80</b>	(E)	25	3	29	195	63	1	
20	<b>21SE80A</b>	(E)	31	3	29	195	55	1	
21	<b>21SE80C</b>	(E)	25	3	29	195	63	1	
22	<b>21ME40</b>	(E)	25	3	0	195	55	1	
23	<b>13M51</b>	(U)	25	3	0	3	19	1	
24	<b>13M50</b>	(U)	25	3	0	3	19	1	
25	<b>21XT4A</b>	(E)	31	3	1	195	55	1	
26	<b>21ME40C</b>	(E)	25	3	0	195	55	1	
27	<b>21SB40P</b>	(E)	25	3	1	195	55	1	
28	<b>21SB40M</b>	(MX)	25	3	1	195	55	1	
29	<b>21SB40C</b>	(E)	25	3	1	195	55	1	
30	<b>21SE40A</b>	(E)	31	3	1	195	55	1	

## 5-2. A BOARD ADJUSTMENTS

### H. FREQUENCY ADJUSTMENT

1. Input a monoscope signal.
2. Set to Service adjustment Mode.
3. Connect a frequency counter to base of Q501 (TP-500 H. DRIVE).
4. Select the item of AFC, set to 3 level (free run).
5. Check H. Frequency for the  $15735 \pm 200$  Hz. (NTSC) or check H. Frequency for the  $15650 \pm 200$  Hz. (Trinorma)
6. Select the item of AFC again, adjust the level "0".
7. Write into the memory by pressing **MUTING** then **ENTER**.

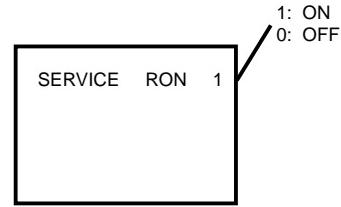
### V. FREQUENCY ADJUSTMENT

1. Select video 1 with no signal input.
2. Set the conditions with standard setting.
3. Connect the frequency counter across TP-508 or CN501 VDY (+) pin ⑥ connector and ground.
4. Check V. Frequency for the  $60 \pm 2$  Hz (NTSC)
5. Check V. Frequency for the  $50 \pm 2$  Hz (Trinorma).

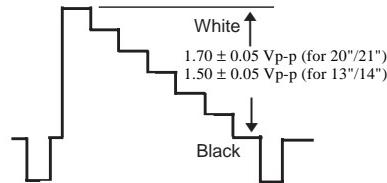
### SUB CONTRACT ADJUSTMENT (SCON)

1. Input a color-bar signal.
2. Select the red color.
3. Set to Service adjustment Mode.
4. Select the item DCOL to "0" level.
5. Set the conditions as follows.

PICTURE	.....	MAX
COLOR	.....	MIN
BRIGHT	.....	CENTER
R ON	.....	ON (1)
G ON	.....	OFF (0)
B ON	.....	OFF (0)



6. Connect an oscilloscope to CN752 Pin ③(for 13"/14") or CN702 Pin ③ (for 20"/21") (R OUT) of C Board and ground.
7. Select RDRV with **1** and **4**.
8. Adjust with **3** and **6** for:  $1.70 \pm 0.05$  Vp-p.
9. Adjust with **3** and **6** for:  $1.50 \pm 0.05$  Vp-p.

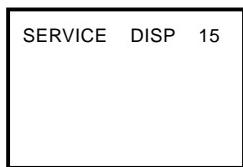


9. Reset the item DCOL to "1" level.
10. Write the memory by pressing **MUTING** then **ENTER**.
11. Return the following back to normal after adjustment.

PICTURE	.....	MAX
COLOR	.....	CENTER
BRIGHT	.....	CENTER
R ON	.....	ON (1)
G ON	.....	ON (1)
B ON	.....	ON (1)

## DISPLAY POSITION ADJUSTMENT (DISP)

1. Input a color-bar signal.
2. Set to Service adjustment Mode.
3. Select DISP with **[1]** and **[4]**.
4. Adjust with **[3]** and **[6]** for adjustment of characters to center .
5. Write the memory by pressing **MUTING** then **ENTER** .
6. Check if the text is displayed on the screen.

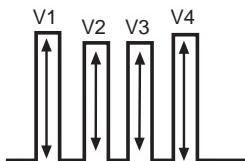


## SUB BRIGHT ADJUSTMENT (SBRT)

1. Input a cross-hatch signal.
2. Set to Service adjustment Mode.
3. Set the PICTURE and BRIGHT to minimum.
4. Select SBRT with **[1]** and **[4]**.
5. Adjust with **[3]** and **[6]** to obtain a faintly visible cross-hatch.
6. Write into the memory by pressing **MUTING** then **ENTER**.

## SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

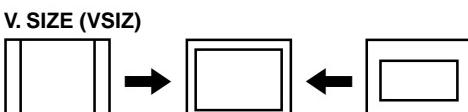
1. Input a color-bar signal.
2. Set to Service adjustment Mode.
3. Select the item DCOL and set to "0" level.
4. Connect an oscilloscope to CN752 Pin ⑤ (for 13"/14") or CN702 Pin ⑤ (for 20"/21") (BLUE OUT) of C Board and ground.
5. Select SHUE and SCOL with **[1]** and **[4]**.
6. Adjust with **[3]** and **[6]** for the  $V1 = V4 \pm 0.1V_{p-p}$  (SCOL) and  $V2 = V3 \pm 0.1V_{p-p}$  (SHUE).



7. Reset the item DCOL to "1" level.
8. Write into the memory by pressing **MUTING** then **ENTER** .

## V. SIZE ADJUSTMENT (VSIZ)

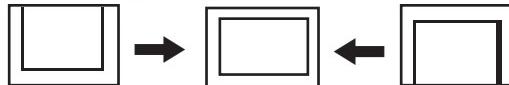
1. Input a cross-hatch signal.
2. Set to Service adjustment mode.
3. Select VSIZ with **[1]** and **[4]** .
4. Adjust with **[3]** and **[6]** for the best vertical size.



## V. CENTER ADJUSTMENT (VPOS)

1. Input a cross-hatch signal.
2. Set to Service adjustment Mode.
3. Select VPOS with **[1]** and **[4]** .
4. Adjust with **[3]** and **[6]** for the best vertical center.
5. Write into the memory by pressing **MUTING** then **ENTER**

### **V. CENTER (VPOS)**

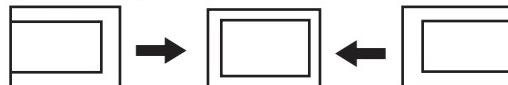


## H. CENTER ADJUSTMENT (HPOS)

Note : Perform this adjustment after checking H. FREQUENCY.

1. Input a cross-hatch signal.
2. Set the Service adjustment Mode.
3. Select HPOS with **[1]** and **[4]** .
4. Adjust with **[3]** and **[6]** for the best horizontal center.
5. Write into the memory by pressing **MUTING** then **ENTER**

### **H. CENTER (VPOS)**



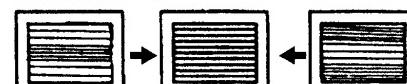
## V. LINEARITY (VLIN) AND V CORRECTION

1. Input a cross-hatch signal.
2. V. Correction is automatically adjusted from the circuit and should satisfy the conditions below:

### **V LINEARITY (VLIN)**



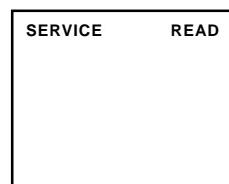
### **V CORRECTION**



## SERVICE ADJUSTMENT MODE MEMORY

1. Change DCOL to "1".
2. After completing all adjustments, press "0" then **ENTER** .

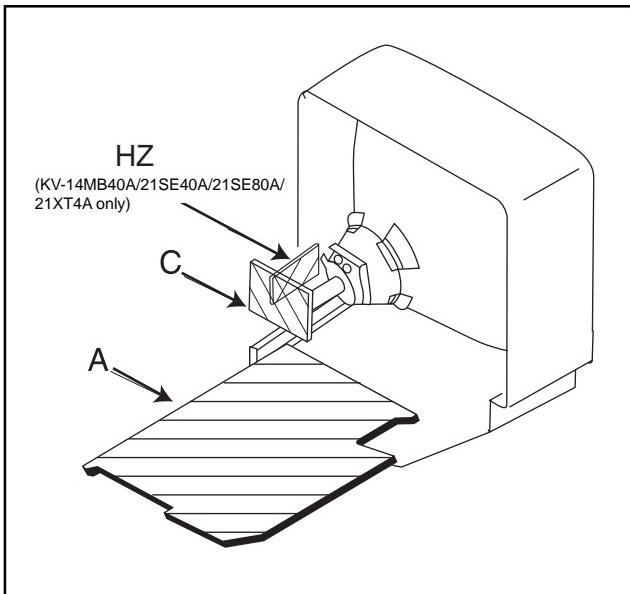
## READ FROM MEMORY



Green  
0

Red  
ENTER

## 6-2. Circuit Boards Location



## 6-3. Printed Wiring Boards and Schematic Diagrams

Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  
pF:  $\mu\mu\text{F}$  50WV or less are not indicated except for electrolytic and tantalums.
- All electrolytics are 50V unless otherwise specified
- Indication of resistance, which does not have one for rating electrical power, is as follows:

Pitch: 5mm  
Rating electrical power 1/4W

- All resistors are in ohms.  
 $\text{K}\Omega=1000\Omega$ ,  $\text{M}\Omega=1000\text{K}\Omega$
- nonflammable resistor.
- $\Delta$ : internal component.
- panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by and repeat the adjustment until the specified value is achieved.  
(Refer to R582 on pages 23 and 24).
- When replacing parts in the table below be sure to perform the related adjustment.

Part replaced ()	Adjustment ()
IC301, IC521, IC602, D572, D573, D574, DY, C507, C511, C574, C575, R578, R582, R583, R584, R585, R586, R625, R626, R634, R635, T504 (FBT)	HV HOLD-DOWN (R582)
IC001, IC602, R030, R624, R626, R632, R633, R635, R636, R637, R638, R639	B+ VOLTAGE CONFIRMATION

- All voltages are in V.
- Voltage is DC with respect to ground unless otherwise noted.
- Readings are taken with a  $10\text{M}\Omega$  digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerance.
- Circle numbers are waveform references.
- : B + Line
- : B - Line
- : signal path

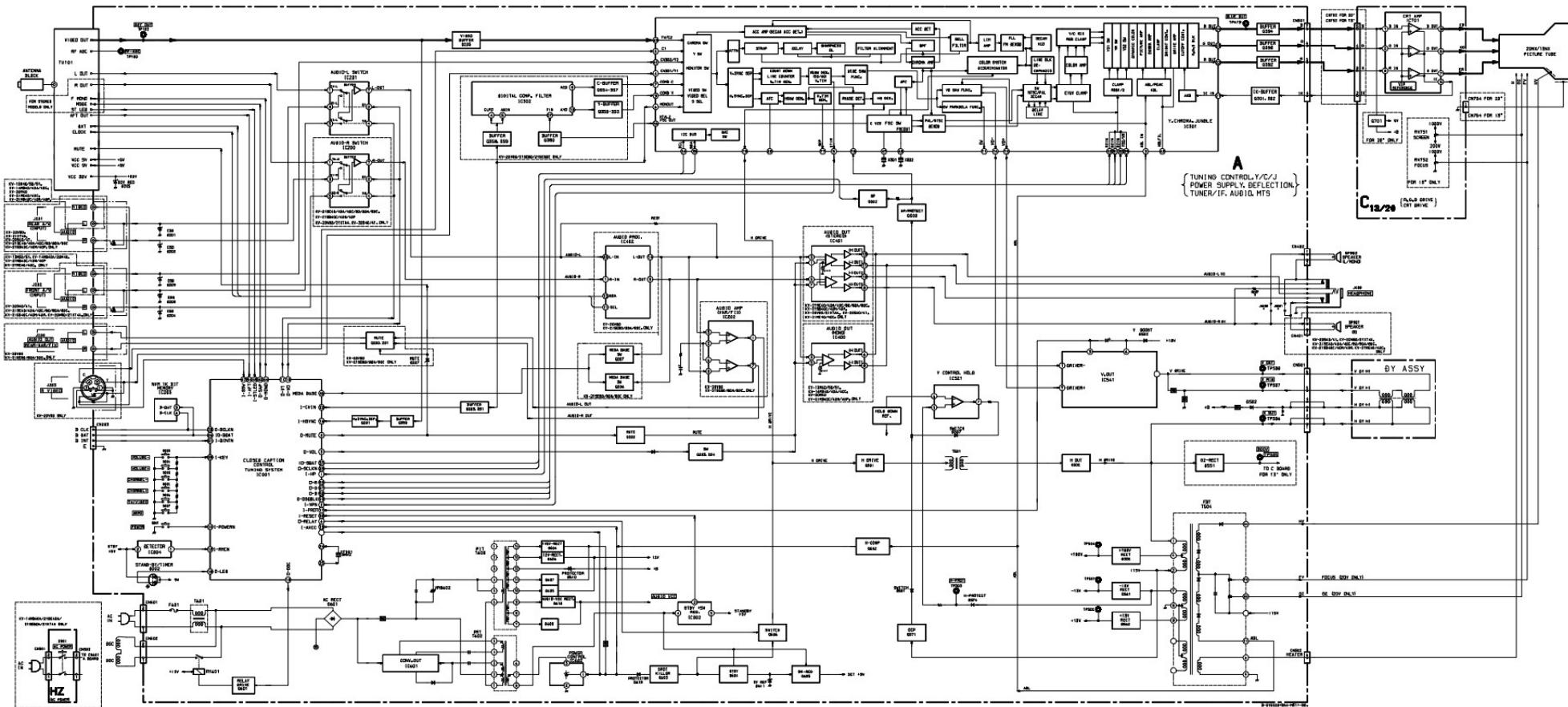
### Reference Information

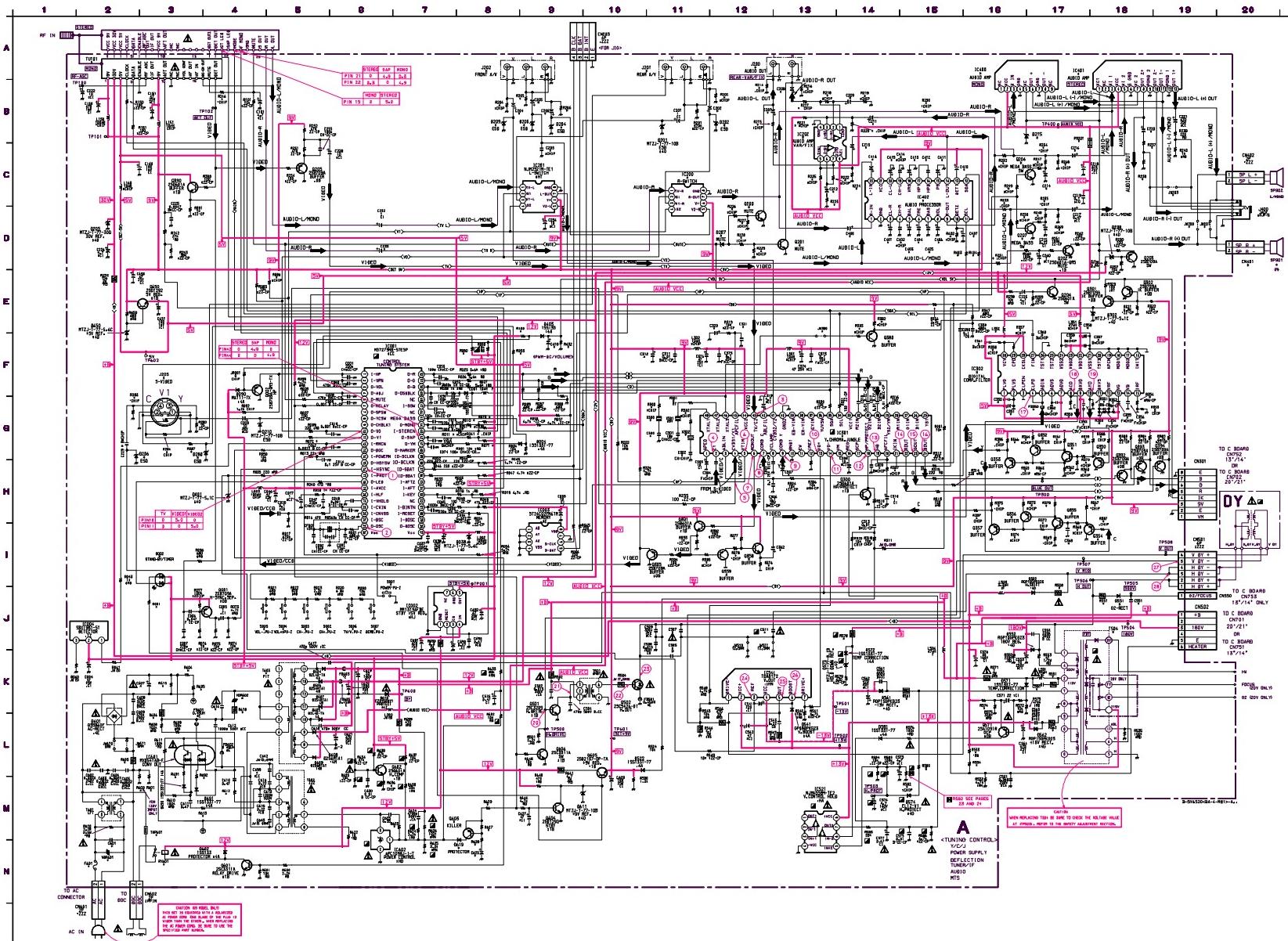
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NON FLAMMABLE CARBON
	: FUSE	NON FLAMMABLE FUSIBLE
	: RW	NON FLAMMABLE WIREWOUND
	: RS	NON FLAMMABLE METAL OXIDE
	: RB	NON FLAMMABLE CEMENT
	: $\times$	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

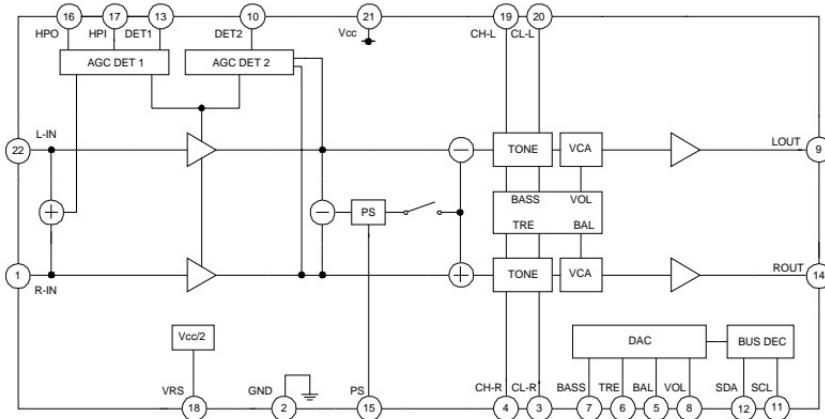
Note: The symbol display is on the component side.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

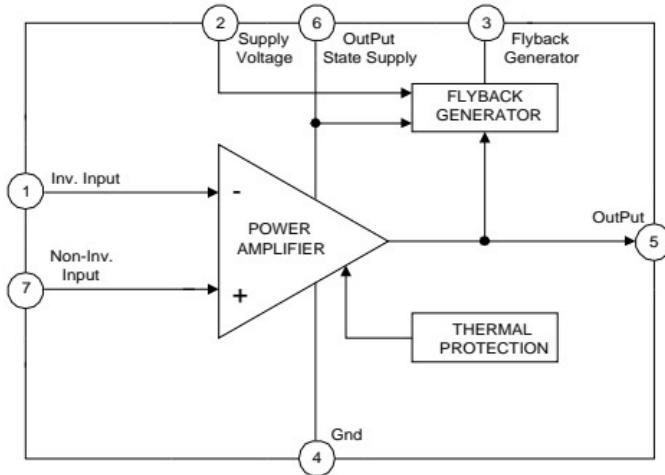
The symbol indicates fast operating fuse. Replace only with fuse of same rating as marked.



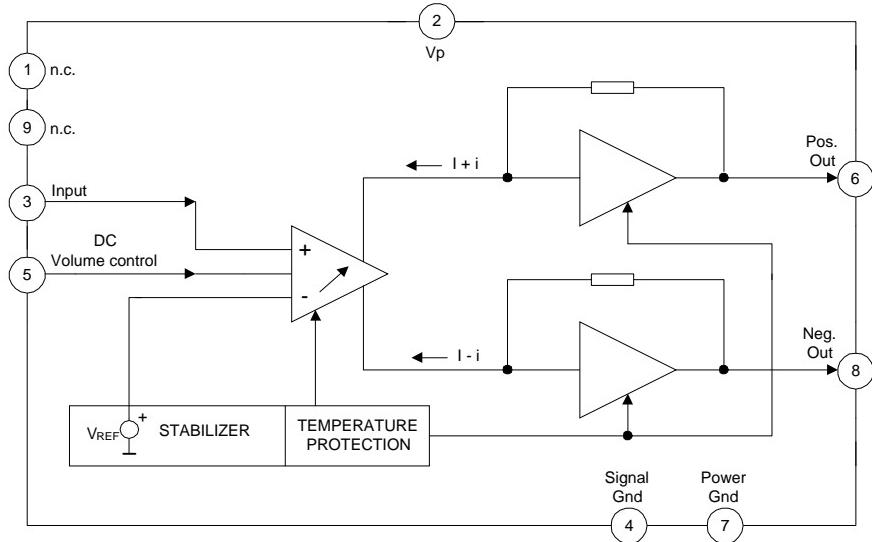




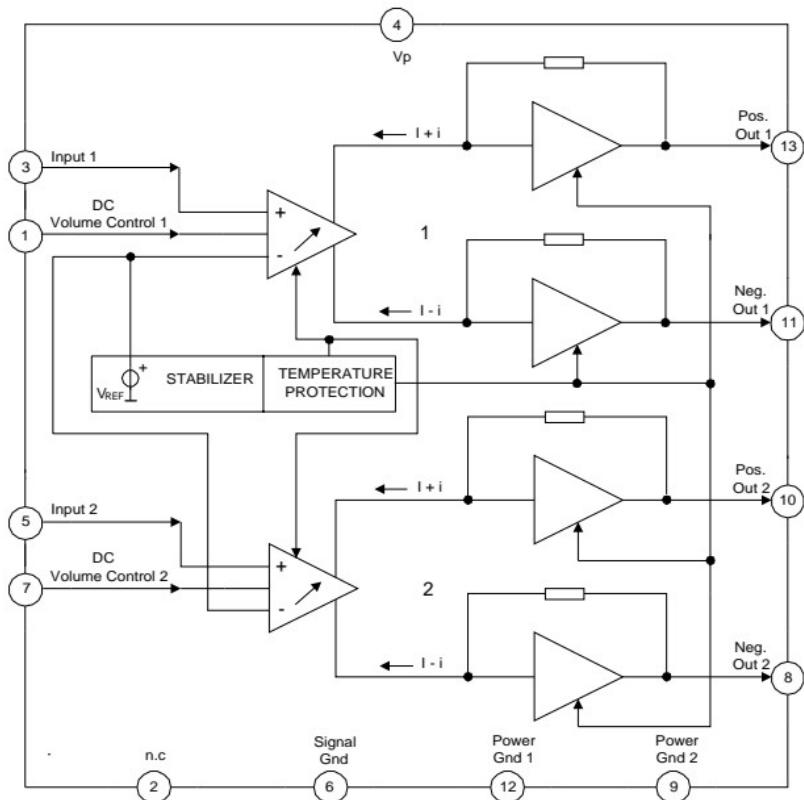
A BOARD : IC402 CXA2021S



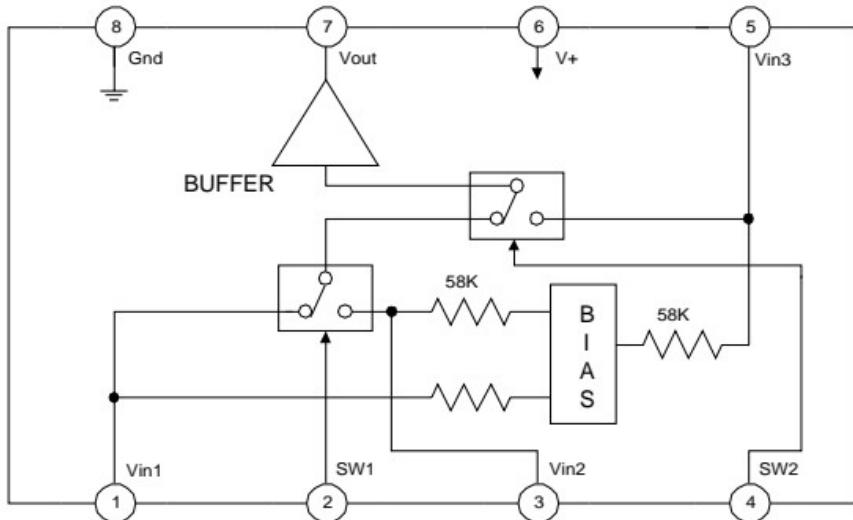
A BOARD : IC541 TDA8172



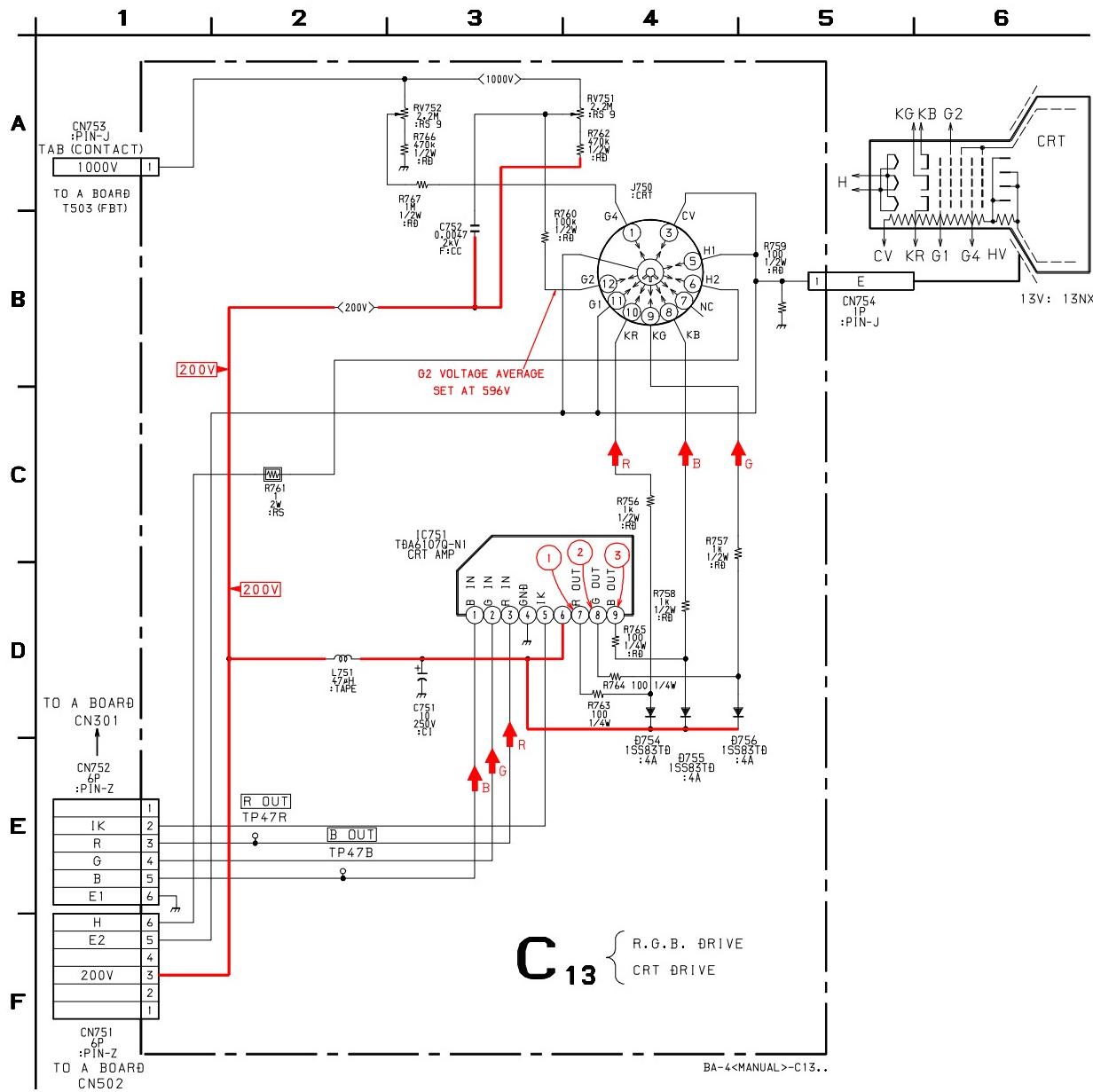
A BOARD : IC400 TDA7056B



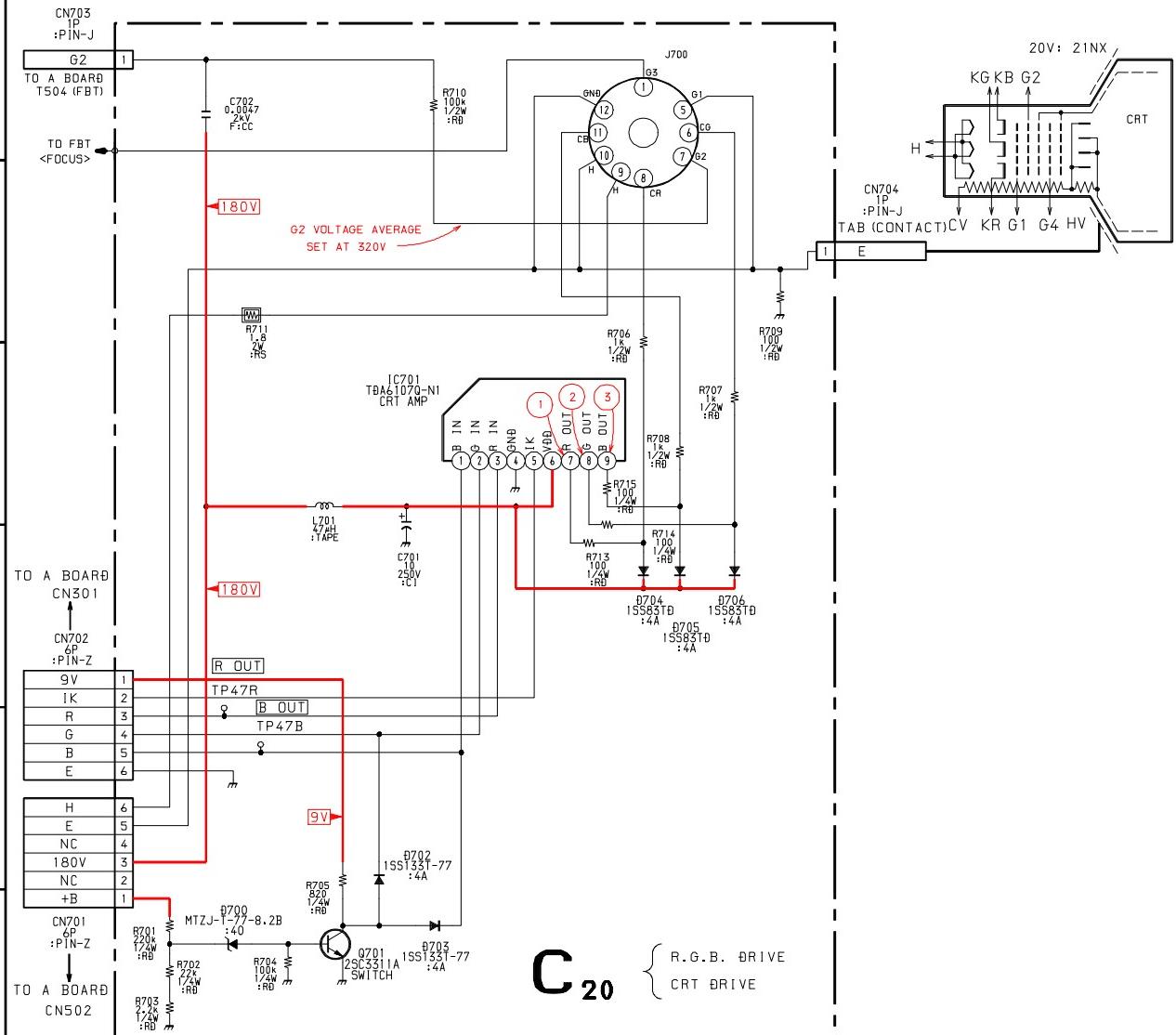
A BOARD : IC401 TDA7057Q



A BOARD : IC200, 201 NJM2521M

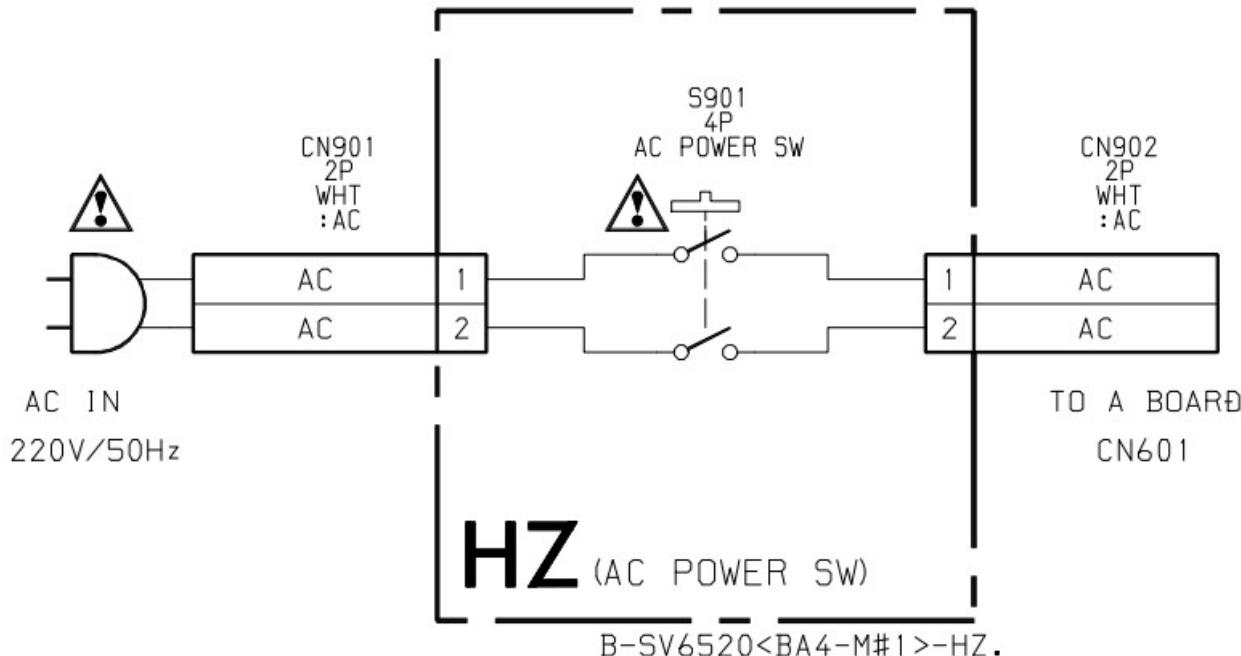


1 2 3 4 5 6



1                    2                    3

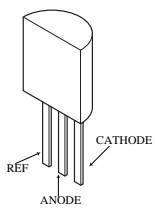
A



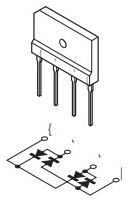
B

## 6-4. SEMICONDUCTORS

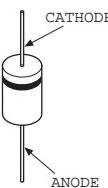
uPC1093J-1-T



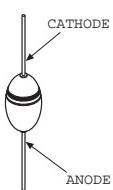
D3SB60F



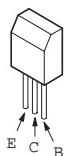
EL1Z-V1  
RGP10GPKG3  
1SS133T-77  
MTZJ-T-77-10B  
MTZJ-T-77-30D  
MTZJ-T-77-5.1C  
D2S4MTA1



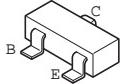
GP08DPKG3



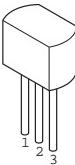
2SC3209  
2SC5426-01  
2SC3209LK-TP  
2SD1292



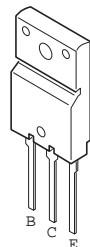
2SB709A-QRS-TX  
2SD601A-QRS-TX



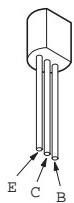
TDA6107Q  
TDA7056B



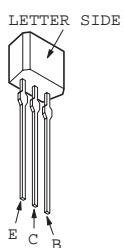
2SD2137-OP-TA



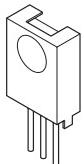
2SA1091-0  
2SD1292



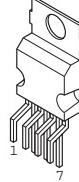
2SA1309A  
2SA1175-HFE  
2SC3311A



SBX198



TDA8172



## SECTION 7 EXPLODED VIEWS

- Items with no part number and no description are not stocked because they are seldom required for routine service

- The component parts of an assembly are indicated by the reference numbers in the remarks column.

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

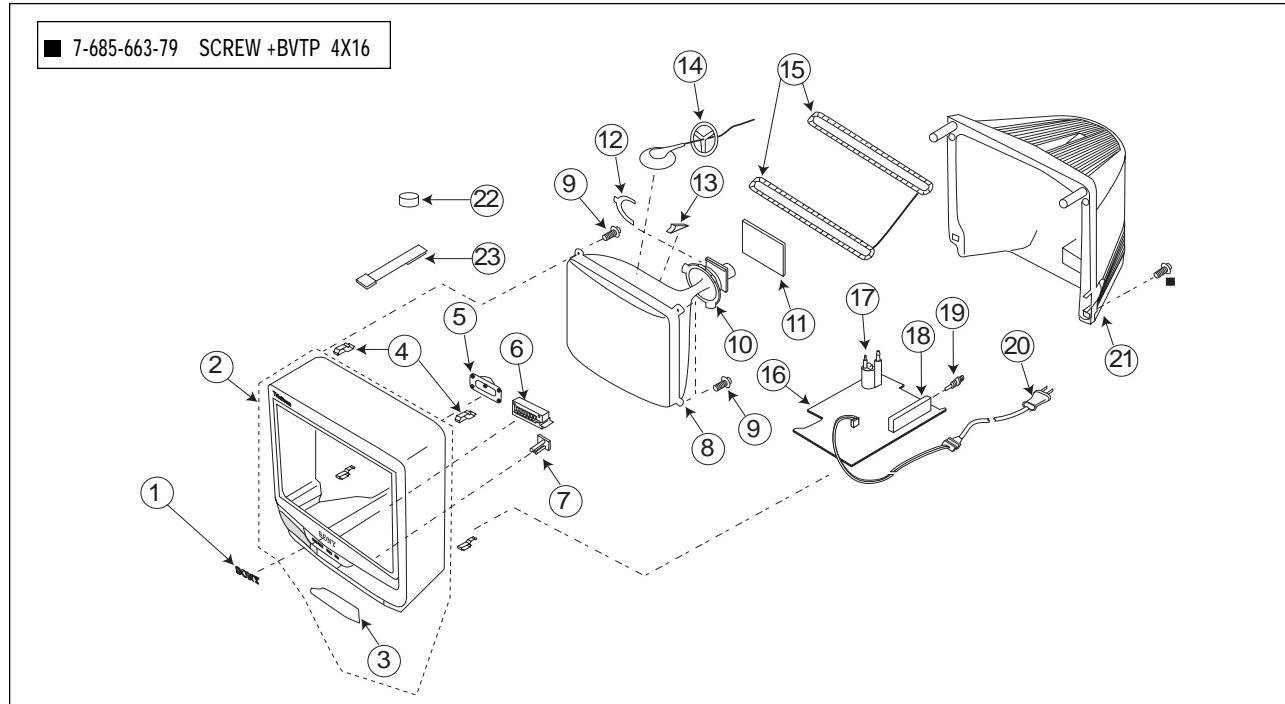
**Note:**

The components identified with gray shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

### 7-1. CHASSIS (KV-13M40/13M50/13M51/14MB40/14MB40A/14MB40C)



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-046-162-01	EMBLEM (NO.6) SONY		13	4-053-005-01	SPACER, DY	
2	X-4035-709-1	BEZNET, ASSY (KV-13M40)	3	14	3-704-372-31	HOLDER, HV	
2	X-4035-710-1	BEZNET, ASSY (KV-13M50)	3	15	1-411-985-31	COIL, DEMAGNETIZATION	
2	X-4035-711-1	BEZNET, ASSY (KV-13M51)	3	16 *	A-1298-305-A	A BOARD, COMPLETE (KV-14MB40C)	
2	X-4035-712-1	BEZNET, ASSY (KV-14MB40C/14MB40)	3	16 *	A-1298-451-A	A BOARD, COMPLETE (KV-14MB40/13M40)	
2	X-4035-713-1	BEZNET, ASSY (KV-14MB40A)	3	16 *	A-1298-452-A	A BOARD, COMPLETE (KV-13M51/13M50)	
16 *	A-1298-465-A	A BOARD, COMPLETE (KV-14MB40A)		17 $\Delta$	1-453-210-11	TRANSFORMER ASSY, FLYBACK (NX-1731//X4E4)	
3	4-051-569-21	DOOR (KV-14MB40A/14MB40C/14MB40/ 13M40/13M50)		18 $\Delta$	8-598-430-00	TUNER BTF-FA401	
3	4-051-569-31	DOOR (KV-13M51)		19	1-766-374-11	PLUG, F PIN	
4	4-055-079-01	HOLDER, DCG		20 $\Delta$	1-751-057-11	CORD, POWER (WITH CONNECTOR) (KV-14MB40/13M40/13M50)	
5	1-505-828-11	SPEAKER (9x5 cm)		20 $\Delta$	1-751-058-11	CORD, POWER (WITH CONNECTOR) (KV-13M51)	
6	4-051-567-01	BUTTON, MULTI (KV-14MB40C/14MB40/ 13M40/13M50/14MB40A)		20 $\Delta$	1-769-796-71	CORD, POWER (WITH CONNECTOR) (KV-14MB40C/14MB40A)	
6	4-051-567-11	BUTTON, MULTI (KV-13M51)		21	4-051-570-11	REAR COVER (KV-13M51)	
7	4-051-568-11	FILTER, REMOTE (KV-14MB40C/14MB40/ 14MB40A/13M40/13M50)		21	4-051-570-41	REAR COVER (KV-14MB40C/14MB40/14MB40A)	
7	4-064-703-01	GUIDE, LED (KV-14MB40A)		21	4-051-870-51	REAR COVER (KV-13M40/13M50)	
8 $\Delta$	8-735-562-05	CRT 14NDXM (SDS)		22	1-452-032-00	MAGNET, DISC	
9	4-365-808-01	SCREW (5), TAPPING		23	4-051-735-22	PIECE (A) 75 CONVERSION CORRECTION	
10 $\Delta$	8-451-418-11	DY 14NDA2-X					
11 *	A-1331-729-A	C BOARD, MOUNTED					
12	1-452-277-00	MAGNET, BMC					

- Items with no part number and no description are not stocked because they are seldom required for routine service

- The component parts of an assembly are indicated by the reference numbers in the remarks column.

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

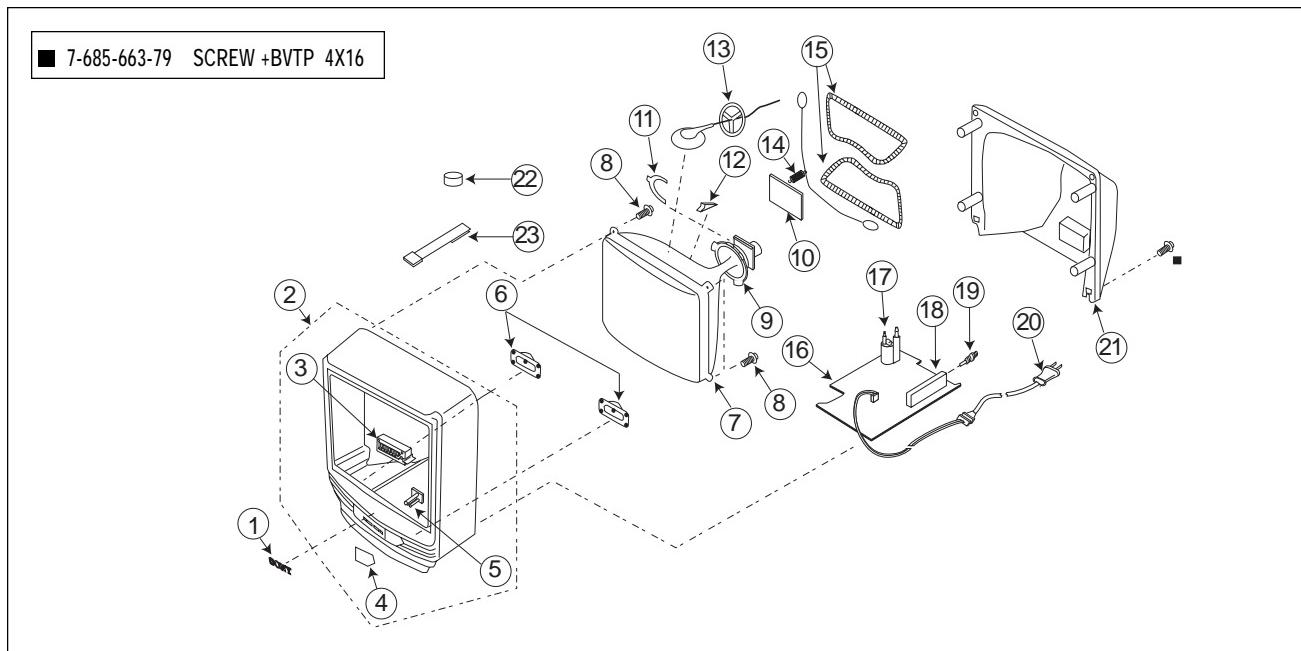
Note:

The components identified with gray shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

Note:

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## 7-2. CHASSIS (KV-20M40/20S40/20S41/21MB40C/21MB40M/21MB40P/ 21SB40C/21SB40M/21SB40P/21XT4A)



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-046-161-01	EMBLEM (NO.8) SONY		15 Δ	1-416-571-11	COIL, DEMAGNETIZATION (KV-21MB40C/21XT4A/21SB40C)	
2	X-4035-231-1	BEZNET, ASSY (KV-20M40/21MB40C)	3-5	15 Δ	1-416-572-21	COIL, DEMAGNETIZATION (KV-20M40/21MB40P/21SB40M/ 20S40/20S41/21MB40M/21SB40P)	
2	X-4035-306-1	BEZNET, ASSY (KV-21MB40P/21MB40M)	3-5	16 *	A-1298-303-A	A BOARD, COMPLETE (KV-20M40/21MB40P/21MB40M)	
2	X-4035-307-1	BEZNET, ASSY (KV-20S40)	3-5	16 *	A-1298-431-A	A BOARD, COMPLETE (KV-20S41/20S40)	
2	X-4035-309-1	BEZNET, ASSY (KV-21SB40M/21SB40C/21SB40P)	3-5	16 *	A-1298-423-A	A BOARD, COMPLETE (KV-21MB40C)	
2	X-4035-696-1	BEZNET, ASSY (KV-20S41)	3-5	16 *	A-1298-538-A	A BOARD, COMPLETE (KV-21SB40M/21SB40P)	
2	X-4035-697-1	BEZNET, ASSY (KV-21XT4A)	3-5	16 *	A-1298-539-A	A BOARD, COMPLETE (KV-21XT4A)	
3	4-062-597-01	BUTTON, MULTI (EXCEPT KV-20S41)	3-5	16 *	A-1298-540-A	A BOARD, COMPLETE (KV-21SB40C)	
3	4-062-597-11	BUTTON, MULTI (KV-20S41 only)		17 Δ	1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX1744/X4E4)	
4	4-062-596-01	DOOR (EXCEPT KV-20S41)		18 Δ	8-598-430-00	TUNER BTF-FA401 (KV-20M40/21MB40C/21MB40M/21MB40P)	
4	4-062-596-11	DOOR (KV-20S41 only)		18 Δ	8-598-431-00	TUNER BTF-WA411 (KV-20S40/20S41/ /21SB40C/21SB40M/21SB40P/21XT4A)	
5	4-062-599-01	GUIDE, LED (EXCEPT KV-21XT4A)		19	1-766-374-11	PLUG, F PIN	
5	4-062-599-11	GUIDE, LED (KV-21XT4A only)		20 Δ	1-751-057-11	CORD, POWER (WITH CONNECTOR) (KV-20M40/21MB40P/ 21SB40M/20S41/21MB40M/21SB40P)	
6	1-505-828-11	SPEAKER (9x5 cm) (KV-20M40/21MB40P/21MB40C/21MB40M)		20 Δ	1-751-058-11	CORD, POWER (WITH CONNECTOR) (KV-20S41)	
6	1-505-831-11	SPEAKER (9x5 cm) (KV-20S41/21SB40M/ 21XT4A/20S40/21SB40C/21SB40P)		20 Δ	1-769-796-71	CORD, POWER (WITH CONNECTOR) (KV-21MB40C/21XT4A/21SB40C)	
7 Δ	8-738-768-05	CRT 21NX (KV-20M40/21MB40P/21SB40M/20S41/ 20S40/21MB40M/21SB40P)		21	4-062-598-01	REAR COVER	
7 Δ	8-738-781-05	CRT 21NX (KV-21MB40C/21XT4A/21SB40C)		21	4-062-598-21	REAR COVER (21SB40M/21XT4A/20S40/21SB40C/21SB40P)	
8	4-365-808-01	SCREW (5), TAPPING		21	4-062-598-41	REAR COVER (KV-20S41)	
9 Δ	8-451-440-21	DY Y21NXA-X		22	1-452-032-00	MAGNET, DISC	
10 *	A-1331-728-A	C BOARD, MOUNTED		23	4-051-735-22	PIECE (A) 75 CONVERSION CORRECTION	
11	1-452-277-00	MAGNET, BMC					
12	4-053-005-01	SPACER, DY					
13	3-704-372-31	HOLDER, HV					
14 *	4-375-394-01	SPRING, TENSION					

- Items with no part number and no description are not stocked because they are seldom required for routine service

- The component parts of an assembly are indicated by the reference numbers in the remarks column.

**Note:**

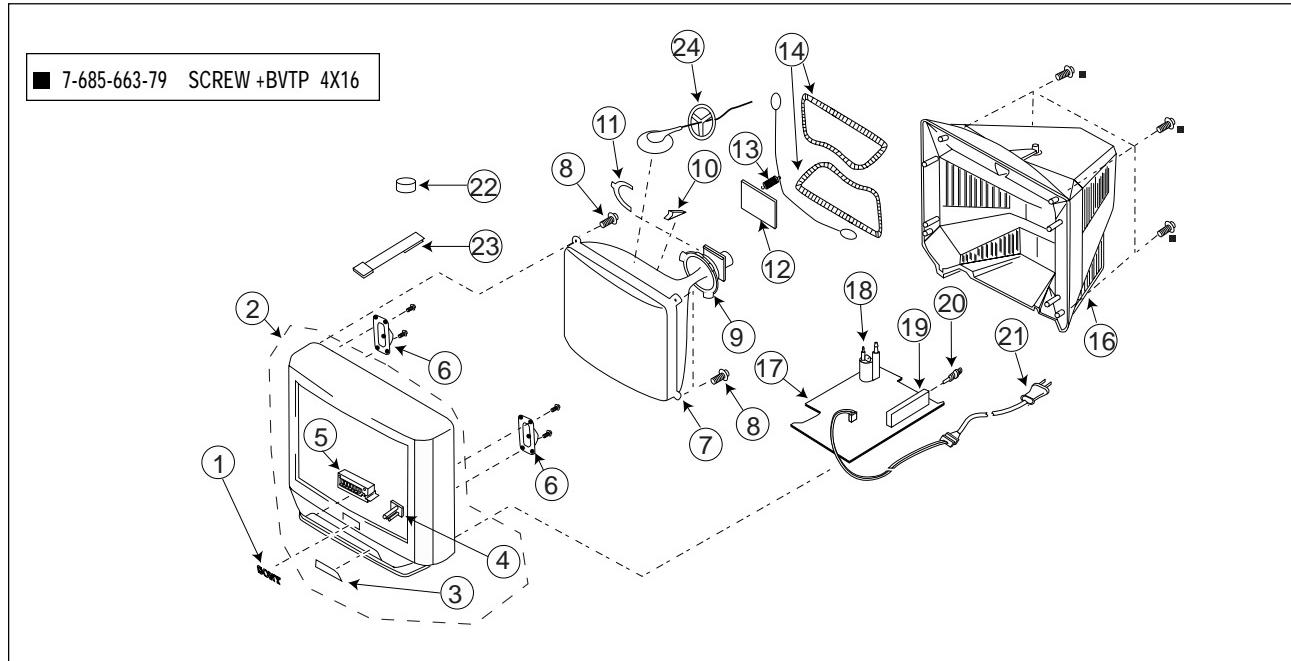
The components identified with gray shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 7-3. CHASSIS (KV-21ME40/21ME40C/21SE40/21SE40A/21SE40C)



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-046-161-01	EMBLEM (NO.8) SONY		16	4-062-602-31	REAR COVER (KV-21SE40/21SE40C/21SE40A)	
2	X-4035-232-1	BEZNET, ASSY (KV-21SE40/21SE40C)	3-5	16	4-062-602-11	REAR COVER (KV-21ME40/21ME40C)	
2	X-4035-311-1	BEZNET, ASSY (KV-21ME40/21ME40C)	3-5	17 *	A-1298-301-A	A BOARD, COMPLETE (KV-21SE40)	
2	X-4035-313-1	BEZNET, ASSY (KV-21SE40A)	3-5	17 *	A-1298-302-A	A BOARD, COMPLETE (KV-21SE40A)	
3	4-062-604-01	DOOR (KV-21SE40/21SE40C/21SE40A)		17 *	A-1298-418-A	A BOARD, COMPLETE (KV-21ME40)	
3	4-062-604-11	DOOR (KV-21ME40/21ME40C)		17 *	A-1298-419-A	A BOARD, COMPLETE (KV-21SE40C)	
4	4-062-607-01	GUIDE, LED		17 *	A-1298-555-A	A BOARD, COMPLETE (KV-21ME40C)	
5	4-062-603-01	BUTTON, MULTI		18 $\Delta$	1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX1744//X4E4)	
6	1-505-831-11	SPEAKER (9x5 cm) (KV-21ME40/21ME40C)		19 $\Delta$	8-598-430-00	TUNER BTF-FA401 (KV-21ME40/21ME40C)	
6	1-505-930-11	SPEAKER (9x5 cm) (KV-21SE40/21SE40C/21SE40A)		19 $\Delta$	8-598-431-00	TUNER BTF-WA411 (KV-21SE40/21SE40A/21SE40C)	
7 $\Delta$	8-738-768-05	CRT 21NX (KV-21SE40/21ME40)		20	1-766-374-11	PLUG, F PIN	
7 $\Delta$	8-738-781-05	CRT 21NX (KV-21SE40C/21SE40A/21ME40C)		21 $\Delta$	1-751-057-11	CORD, POWER (WITH CONNECTOR) (KV-21SE40/21ME40)	
8	4-365-808-01	SCREW (5), TAPPING		21 $\Delta$	1-769-796-71	CORD, POWER (WITH CONNECTOR) (KV-21SE40C/21SE40A/21ME40C)	
9 $\Delta$	8-451-440-21	DY Y21NXA-X		22	1-452-032-00	MAGNET, DISC	
10	4-053-005-01	SPACER, DY		23	4-051-735-22	PIECE (A) 75 CONVERSION CORRECTION	
11	1-452-277-00	MAGNET, BMC		24	3-704-372-31	HOLDER, HV	
12 *	A-1331-728-A	C BOARD, MOUNTED					
13 *	4-375-394-01	SPRING, TENSION					
14 $\Delta$	1-416-571-11	COIL, DEMAGNETIZATION (KV-21SE40C/21SE40A/21ME40C)					
14 $\Delta$	1-416-572-21	COIL, DEMAGNETIZATION (KV-21SE40/21ME40)					

- Items with no part number and no description are not stocked because they are seldom required for routine service

- The component parts of an assembly are indicated by the reference numbers in the remarks column.

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

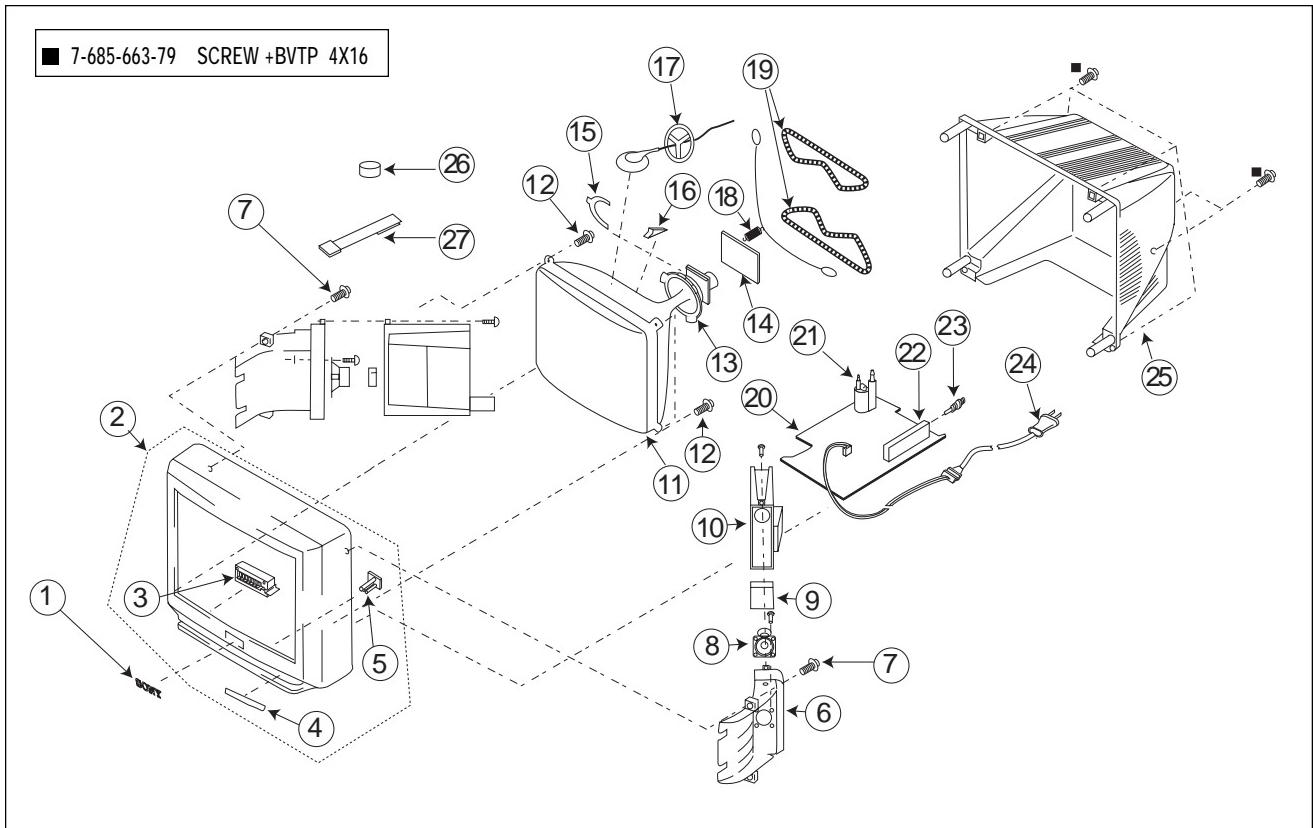
**Note:**

The components identified with gray shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## 7-4. CHASSIS (KV-20V80/21SE80/21SE80A/21SE80C)



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-046-161-01	EMBLEM (NO.8) SONY		19 $\Delta$	1-416-571-11	COIL, DEMAGNETIZATION (KV-21SE80C/21SE80A)	
2	X-4035-233-1	BEZNET, ASSY (KV-20V80/21SE80C/21SE80)	3-5	19 $\Delta$	1-416-572-21	COIL, DEMAGNETIZATION (KV-20V80/21SE80)	
2	X-4035-314-1	BEZNET, ASSY (KV-21SE80A)	3-5	20 *	A-1298-304-A	A BOARD, COMPLETE (KV-20V80)	
3	4-062-603-01	BUTTON, MULTI		20 *	A-1298-436-A	A BOARD, COMPLETE (KV-21SE80C)	
4	4-062-604-01	DOOR		20 *	A-1298-437-A	A BOARD, COMPLETE (KV-21SE80)	
5	4-062-607-01	GUIDE, LED		20 *	A-1298-438-A	A BOARD, COMPLETE (KV-21SE80A)	
6 *	4-062-609-01	BAFFLE, SPEAKER		21 $\Delta$	1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX1744//X4E4)	
7	4-384-096-01	SCREW(4X16) TAPPING +P		22 $\Delta$	8-598-431-00	TUNER BTF-WA411	
8	1-505-404-11	SPEAKER (8CM)		23	1-766-374-11	PLUG, F PIN	
9 *	4-064-221-01	SPONGE, ACOUSTIC		24 $\Delta$	1-751-057-11	CORD, POWER (WITH CONNECTOR)	(KV-20V80/21SE80)
10	X-4033-616-1	COVER ASSY, SPEAKER		24 $\Delta$	1-769-796-71	CORD, POWER (WITH CONNECTOR)	(KV-21SE80C/21SE80A)
11 $\Delta$	8-738-768-05	CRT 21NX (KV-20V80/21SE80)		25	4-062-610-01	REAR COVER (KV-20V80)	
11 $\Delta$	8-738-781-05	CRT 21NX (KV-21SE80C/21SE80A)		25	4-062-610-11	REAR COVER (KV-21SE80C/21SE80/21SE80A)	
12	4-365-808-01	SCREW (5), TAPPING		26	1-452-032-00	MAGNET, DISC	
13 $\Delta$	8-451-440-21	DY Y21NXA-X		27	4-051-735-22	PIECE (A) 75 CONVERSION CORRECTION	
14 *	A-1331-728-A	C BOARD, MOUNTED					
15	1-452-277-00	MAGNET, BMC					
16	4-053-005-01	SPACER, DY					
17	3-704-372-31	HOLDER, HV					
18	4-375-394-01	SPRING, TENSION					

- Items with no part number and no description are not stocked because they are seldom required for routine service

- The component parts of an assembly are indicated by the reference numbers in the remarks column.

**Note:**

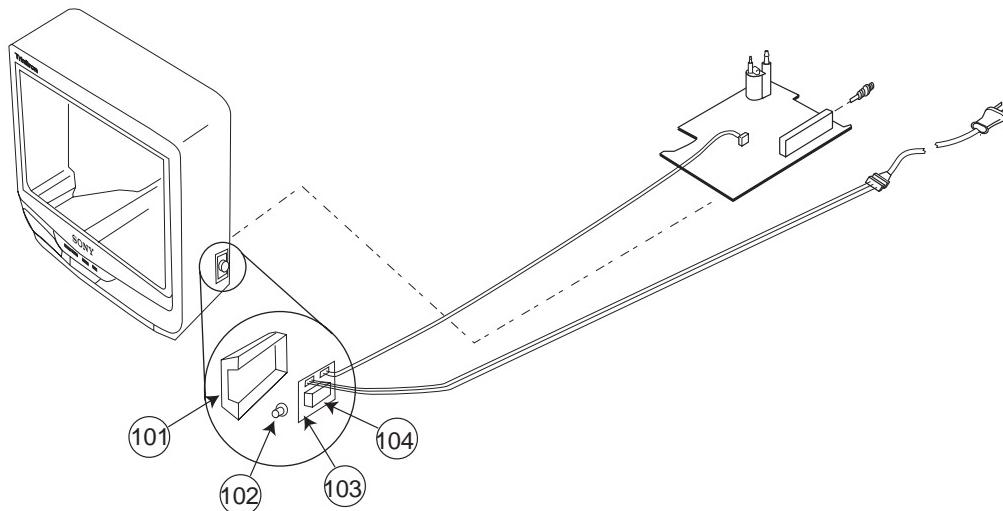
The components identified with gray shading and a critical symbol (  $\Delta$  ) are critical for safety. Replace only with part number specified.

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## 7-5. MAIN POWER SWITCH (KV-14MB40A/21SE40A/21SE80A/21XT4A)



REF.NO.	PART NO.	DESCRIPTION	REMARK
101	4-062-612-01	BRACKET, MAIN POWER	
102	4-062-611-01	BUTTON, MAIN POWER	
103	A-1372-117-A	MONTEED PCB, HZ	
104 $\Delta$	1-571-433-21	SWITCH, PUSH (AC POWER)	

## SECTION 8

### ELECTRICAL PARTS LIST

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**A**

## COMMON PARTS LISTING

**Note:**

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

The components identified by  $\blacksquare$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

**RESISTORS**

- All resistors are in ohms
- F : nonflammable

**CAPACITORS**

- $MF = \mu F$

**INDUCTORS**

- $UH = \mu H$ ,  $MMH = mH$

When indicating parts by reference number, please include the board name.

REF.NO.	PART NO.	DESCRIPTION	REMARK
<b>A</b>			
*A BOARD, COMPLETE			
	A-1298-451-A (KV-13M40/14MB40)		
	A-1298-305-A (KV-14MB40C)		
	A-1298-465-A (KV-14MB40A)		
	A-1298-303-A (KV-20M40/21MB40M/21MB40P)		
	A-1298-432-A (KV-21MB40C)		
	A-1298-301-A (KV-21SE40)		
	A-1298-431-A (KV-20S40/20S41)		
	A-1298-419-A (KV-21SE40C)		
	A-1298-304-A (KV-20V80)		
	A-1298-437-A (KV-21SE80)		
	A-1298-438-A (KV-21SE80A)		
	A-1298-436-A (KV-21SE80C)		
	A-1298-418-A (KV-21ME40)		
	A-1298-452-A (KV-13M50/13M51)		
	A-1298-539-A (KV-21XT4A)		
	A-1298-555-A (KV-21ME40C)		
	A-1298-538-A (KV-21SB40M/21SB40P)		
	A-1298-540-A (KV-21SB40C)		
	A-1298-302-A (KV-21SE40A)		
	1-533-223-11 HOLDER, FUSE		
*	1-900-800-67 CONNECTOR ASSY, 6P MINI MICRO		
*	1-900-802-45 CONNECTOR ASSY, 7 PIN		
	4-382-854-11 SCREW (M3X10), P, SW (+)		

**CAPACITOR**

C001	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C004	1-104-664-11	ELECT	47MF	20%	25V
C005	1-126-960-11	ELECT	1MF	20%	50V
C006	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C007	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C008	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C010	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C011	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C012	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C013	1-163-259-91	CERAMIC CHIP	220PF	5%	50V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C014	1-164-004-11	CERAMIC CHIP	0.1MF
C017	1-126-960-11	ELECT	1MF
C019	1-163-135-00	CERAMIC CHIP	560PF
C020	1-130-495-00	FILM	0.1MF
C027	1-163-259-91	CERAMIC CHIP	220PF
C028	1-163-005-11	CERAMIC CHIP	470PF
C030	1-163-259-91	CERAMIC CHIP	220PF
C034	1-163-037-11	CERAMIC CHIP	0.022MF
C037	1-164-161-11	CERAMIC CHIP	0.0022MF
C038	1-126-941-11	ELECT	470MF
C039	1-126-964-11	ELECT	10MF
C046	1-104-664-11	ELECT	47MF
C047	1-163-259-91	CERAMIC CHIP	220PF
C048	1-163-009-11	CERAMIC CHIP	0.001MF
C050	1-163-251-11	CERAMIC CHIP	100PF
C051	1-163-251-11	CERAMIC CHIP	100PF
C052	1-163-251-11	CERAMIC CHIP	100PF
C053	1-163-251-11	CERAMIC CHIP	100PF
C060	1-163-005-11	CERAMIC CHIP	470PF
C062	1-164-161-11	CERAMIC CHIP	0.0022MF
C065	1-163-009-11	CERAMIC CHIP	0.001MF
C072	1-163-259-91	CERAMIC CHIP	220PF
C074	1-163-251-11	CERAMIC CHIP	100PF
C091	1-163-231-11	CERAMIC CHIP	15PF
C092	1-163-231-11	CERAMIC CHIP	15PF
C101	1-126-963-11	ELECT	4.7MF
C150	1-126-935-11	ELECT	470MF
C151	1-104-664-11	ELECT	47MF
C160	1-126-382-11	ELECT	100MF
C200	1-107-698-11	ELECT	10MF
C201	1-126-960-11	ELECT	1MF
C202-209		VARIANT (SEE VARIANT PARTS LIST)	
C211-214		VARIANT (SEE VARIANT PARTS LIST)	
C215	1-126-957-11	ELECT	0.22MF
C216		VARIANT (SEE VARIANT PARTS LIST)	
C217	1-126-959-11	ELECT	0.47MF
C218	1-126-941-11	ELECT	470MF
C219	1-130-495-00	FILM	0.1MF

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**COMMON PARTS LISTING****A**

<b>REF.NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>		<b>REMARK</b>		<b>REF.NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>		<b>REMARK</b>	
C220		VARIANT (SEE VARIANT PARTS LIST)				C507		VARIANT (SEE VARIANT PARTS LIST)			
C221	1-126-941-11	ELECT	470MF	20%	25V	C508	1-106-371-00	MYLAR	0.015MF	20%	200V
C222	1-126-964-11	ELECT	10MF	20%	50V	C509 $\Delta$	1-162-115-00	CERAMIC	330PF	10%	2KV
C223	1-126-963-11	ELECT	4.7MF	20%	50V	C511		VARIANT (SEE VARIANT PARTS LIST)			
C225	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	C531	1-106-387-00	MYLAR	0.068MF	10%	200V
C226	1-107-635-11	ELECT	4.7MF	20%	160V	C541	1-126-969-11	ELECT	220MF	20%	50V
C228	1-126-964-11	ELECT	10MF	20%	50V	C42	1-126-967-11	ELECT	47MF	20%	50V
C229		VARIANT (SEE VARIANT PARTS LIST)				C543	1-136-169-00	FILM	0.22MF	5%	50V
C232	1-126-960-11	ELECT	1MF	20%	50V	C551		VARIANT (SEE VARIANT PARTS LIST)			
C233		VARIANT (SEE VARIANT PARTS LIST)				C552	1-102-244-00	CERAMIC	220PF	10%	500V
C234	1-126-964-11	ELECT	10MF	20%	50V	C553	1-107-652-11	ELECT	10MF	20%	250V
C255	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	C561	1-102-244-00	CERAMIC	220PF	10%	500V
C260	1-126-960-11	ELECT	1MF	20%	50V	C562	1-126-941-11	ELECT	470MF	20%	25V
C300		VARIANT (SEE VARIANT PARTS LIST)				C563	1-102-244-00	CERAMIC	220PF	10%	500V
C301	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	C564	1-126-941-11	ELECT	470MF	20%	25V
C302		VARIANT (SEE VARIANT PARTS LIST)				C571 $\Delta$	1-126-965-11	ELECT	22MF	20%	50V
C303	1-126-964-11	ELECT	10MF	20%	50V	C573	1-126-963-11	ELECT	4.7MF	20%	50V
C304		VARIANT (SEE VARIANT PARTS LIST)				C574	1-107-635-11	ELECT	4.7MF	20%	160V
C305	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C575	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C306	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C576	1-123-024-21	ELECT	33MF		160V
C307		VARIANT (SEE VARIANT PARTS LIST)				C577 $\Delta$	1-126-959-11	ELECT	0.47MF	20%	50V
C308	1-126-964-11	ELECT	10MF	20%	50V	C591		VARIANT (SEE VARIANT PARTS LIST)			
C309		VARIANT (SEE VARIANT PARTS LIST)				C601		VARIANT (SEE VARIANT PARTS LIST)			
C310	1-126-960-11	ELECT	1MF	20%	50V	C602 $\Delta$	1-113-920-11	CERAMIC	0.0022MF	20%	250V
C311	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C603 $\Delta$	1-113-920-11	CERAMIC	0.0022MF	20%	250V
C312		VARIANT (SEE VARIANT PARTS LIST)				C604 $\Delta$	1-113-920-11	CERAMIC	0.0022MF	20%	250V
C313	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C605 $\Delta$	1-113-920-11	CERAMIC	0.0022MF	20%	250V
C316	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C607		VARIANT (SEE VARIANT PARTS LIST)			
C317	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C608	1-113-910-11	CERAMIC	470PF	10%	250V
C318	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C609	1-113-910-11	CERAMIC	470PF	10%	250V
C319	1-126-963-11	ELECT	4.7MF	20%	50V	C610	1-136-173-00	FILM	0.47MF	5%	50V
C320		VARIANT (SEE VARIANT PARTS LIST)				C611	1-136-173-00	FILM	0.47MF	5%	50V
C321		VARIANT (SEE VARIANT PARTS LIST)				C612	1-164-645-11	CERAMIC	1000PF	10%	500V
C330	1-163-007-11	CERAMIC CHIP	680PF	10%	50V	C613	1-164-645-11	CERAMIC	1000PF	10%	500V
C348		VARIANT (SEE VARIANT PARTS LIST)				C614		VARIANT (SEE VARIANT PARTS LIST)			
C350-362		VARIANT (SEE VARIANT PARTS LIST)				C615	1-136-169-00	FILM	0.22MF	5%	50V
C373	1-163-038-91	CERAMIC CHIP	0.1MF		25V	C616	1-136-169-00	FILM	0.22MF	5%	50V
C374	1-104-664-11	ELECT	47MF	20%	25V	C617	1-165-127-11	CERAMIC	470PF	10%	500V
C375	1-163-038-91	CERAMIC CHIP	0.1MF		25V	C618	1-165-127-11	CERAMIC	470PF	10%	500V
C376	1-104-664-11	ELECT	47MF	20%	25V	C619	1-123-024-21	ELECT	33MF		160V
C390	1-130-495-00	FILM	0.1MF	5%	50V	C620	1-126-942-61	ELECT	1000MF	20%	25V
C400-407		VARIANT (SEE VARIANT PARTS LIST)				C621	1-126-941-11	ELECT	470MF	20%	25V
C410-416		VARIANT (SEE VARIANT PARTS LIST)				C623	1-136-171-00	FILM	0.33MF	5%	50V
C418		VARIANT (SEE VARIANT PARTS LIST)				C624	1-137-417-11	MYLAR	0.0047MF	10%	200V
C502	1-106-371-00	MYLAR	0.015MF	20%	200V	C625		VARIANT (SEE VARIANT PARTS LIST)			
C504	1-102-228-00	CERAMIC	470PF	10%	500V	C626	1-126-959-11	ELECT	0.47MF	20%	50V
C505		VARIANT (SEE VARIANT PARTS LIST)				C627	1-126-967-11	ELECT	47MF	20%	50V



## COMMON PARTS LISTING

### Note:

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

### Note:

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>		<u>REMARK</u>			<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>		<u>REMARK</u>
C629	1-104-665-11	ELECT	100MF	20%	25V		D571 $\Delta$	8-719-991-33	DIODE	1SS133T-77	
C630	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V		D572	8-719-991-33	DIODE	1SS133T-77	
C651	1-126-382-11	ELECT	100MF	20%	16V		D573	8-719-110-08	DIODE	MTZJ-T-77-8.2B	
C653	1-104-664-11	ELECT	47MF	20%	25V		D574 $\Delta$	8-719-302-43	DIODE	EL1Z-V1	
C690	1-126-959-11	ELECT	0.47MF	20%	50V		D581	8-719-991-33	DIODE	1SS133T-77	
C691	1-126-941-11	ELECT	470MF	20%	25V		D601 $\Delta$	8-719-510-51	DIODE	D3SB60F	
C692	1-104-664-11	ELECT	47MF	20%	25V		D602	8-719-991-33	DIODE	1SS133T-77	
C693	1-136-173-00	FILM	0.47MF	5%	50V		D604	8-719-052-86	DIODE	D2L40-TA	
C699		VARIANT (SEE VARIANT PARTS LIST)					D605	8-719-052-86	DIODE	D2L40-TA	
<b><u>FILTER</u></b>											
CF001	1-767-487-11	VIBRATOR, CRYSTAL					D606	8-719-022-97	DIODE	D2S4MTA1	
<b><u>CONNECTOR</u></b>											
CN203	1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P					D607	8-719-022-97	DIODE	D2S4MTA1	
CN401		VARIANT (SEE VARIANT PARTS LIST)					D608	8-719-018-84	DIODE	D2S6MTA1	
CN402	1-564-505-11	PLUG, CONNECTOR 2P					D609	8-719-018-84	DIODE	D2S6MTA1	
CN501 *	1-580-798-11	CONNECTOR PIN (DY) 6P					D610 $\Delta$	8-719-057-52	DIODE	EZ0150AV1	
CN601 *	1-580-843-11	PIN, CONNECTOR (POWER)					D611	8-719-110-17	DIODE	MTZJ-T-77-10B	
CN602	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P					D619		VARIANT (SEE VARIANT PARTS LIST)		
<b><u>DIODE</u></b>											
D001	8-719-921-44	DIODE	MTZJ-T-77-5.1C				D650	8-719-109-89	DIODE	MTZJ-T-77-5.6C	
D002		VARIANT (SEE VARIANT PARTS LIST)					D690	8-719-991-33	DIODE	1SS133T-77	
D003	8-719-991-33	DIODE	1SS133T-77				D691	8-719-991-33	DIODE	1SS133T-77	
D004	8-719-991-33	DIODE	1SS133T-77				D611	8-719-110-17	DIODE	MTZJ-T-77-10B	
D038	8-719-109-89	DIODE	MTZJ-T-77-5.6C				D619		VARIANT (SEE VARIANT PARTS LIST)		
D090	8-719-404-49	DIODE	MA111-TX				D650	8-719-109-89	DIODE	MTZJ-T-77-5.6C	
D201	8-719-110-17	DIODE	MTZJ-T-77-10B				D690	8-719-991-33	DIODE	1SS133T-77	
D202-204		VARIANT (SEE VARIANT PARTS LIST)					D691	8-719-991-33	DIODE	1SS133T-77	
D205	8-719-982-22	DIODE	MTZJ-T-77-30D				D611	8-719-110-17	DIODE	MTZJ-T-77-10B	
D206-207		VARIANT (SEE VARIANT PARTS LIST)					D619		VARIANT (SEE VARIANT PARTS LIST)		
D208	8-719-110-17	DIODE	MTZJ-T-77-10B				D650	8-719-109-89	DIODE	MTZJ-T-77-5.6C	
D209		VARIANT (SEE VARIANT PARTS LIST)					D690	8-719-991-33	DIODE	1SS133T-77	
D210	8-719-110-17	DIODE	MTZJ-T-77-10B				D691	8-719-991-33	DIODE	1SS133T-77	
D215		VARIANT (SEE VARIANT PARTS LIST)					D611	8-719-110-17	DIODE	MTZJ-T-77-10B	
D280		VARIANT (SEE VARIANT PARTS LIST)					D619		VARIANT (SEE VARIANT PARTS LIST)		
D302	8-719-921-44	DIODE	MTZJ-T-77-5.1C				D650	8-719-109-89	DIODE	MTZJ-T-77-5.6C	
D403	8-719-991-33	DIODE	1SS133T-77				D690	8-719-991-33	DIODE	1SS133T-77	
D502	8-719-302-43	DIODE	RGP10GPKG23				D691	8-719-991-33	DIODE	1SS133T-77	
D522	8-719-991-33	DIODE	1SS133T-77				D611	8-719-110-17	DIODE	MTZJ-T-77-10B	
D541	8-719-908-03	DIODE	GP08DPKG23				D619		VARIANT (SEE VARIANT PARTS LIST)		
D551		VARIANT (SEE VARIANT PARTS LIST)					D650	8-719-109-89	DIODE	MTZJ-T-77-5.6C	
D552	8-719-302-43	DIODE	RGP10GPKG23				D690	8-719-991-33	DIODE	1SS133T-77	
D561	8-719-979-85	DIODE	RGP15GPKG23				D691	8-719-991-33	DIODE	1SS133T-77	
D562	8-719-979-85	DIODE	RGP15GPKG23				D611	8-719-110-17	DIODE	MTZJ-T-77-10B	
<b><u>FUSE</u></b>											
F601		VARIANT (SEE VARIANT PARTS LIST)					D619		VARIANT (SEE VARIANT PARTS LIST)		
<b><u>FERRITE BEAD</u></b>											
FB501	1-410-396-41	FERRITE	0.45UH				FB501	1-410-396-41	FERRITE	0.45UH	
FB601	1-410-396-41	FERRITE	0.45UH				FB601	1-410-396-41	FERRITE	0.45UH	
FB602	1-410-396-41	FERRITE	0.45UH				FB602	1-410-396-41	FERRITE	0.45UH	
FB603	1-412-911-11	FERRITE					FB603	1-412-911-11	FERRITE		
FB605	1-410-396-41	FERRITE	0.45UH				FB605	1-410-396-41	FERRITE	0.45UH	
<b><u>IC</u></b>											
IC001	8-759-540-75	IC	M37273M8-STESP				IC001	8-759-540-75	IC	M37273M8-STESP	
IC002	8-759-371-21	IC	MM1319AFBE				IC002	8-759-371-21	IC	MM1319AFBE	
IC003	8-759-354-28	IC	ST24C02FM6TR				IC003	8-759-354-28	IC	ST24C02FM6TR	
IC004	8-742-014-11	IC	SBX1981-51				IC004	8-742-014-11	IC	SBX1981-51	
IC200		VARIANT (SEE VARIANT PARTS LIST)					IC200		VARIANT (SEE VARIANT PARTS LIST)		
IC201	8-759-450-93	IC	NJM2521M-TE1				IC201	8-759-450-93	IC	NJM2521M-TE1	
IC202		VARIANT (SEE VARIANT PARTS LIST)					IC202		VARIANT (SEE VARIANT PARTS LIST)		
IC301-302		VARIANT (SEE VARIANT PARTS LIST)					IC301-302		VARIANT (SEE VARIANT PARTS LIST)		
IC400-402		VARIANT (SEE VARIANT PARTS LIST)					IC400-402		VARIANT (SEE VARIANT PARTS LIST)		
IC521 $\Delta$	8-759-100-96	IC	NJM4558M-TE2				IC521 $\Delta$	8-759-100-96	IC	NJM4558M-TE2	
IC541	8-759-980-58	IC	TDA8172				IC541	8-759-980-58	IC	TDA8172	
IC601 $\Delta$	8-729-039-65	TRANSISITOR	MX0541AB-F				IC601 $\Delta$	8-729-039-65	TRANSISITOR	MX0541AB-F	
IC602 $\Delta$	8-759-198-31	IC	UPC1093J-1-T				IC602 $\Delta$	8-759-198-31	IC	UPC1093J-1-T	

Note:

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

Note:

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## COMMON PARTS LISTING



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK				
<u>JACK</u>											
J200-203		VARIANT (SEE VARIANT PARTS LIST)		Q501	8-729-140-50	TRANSISTOR 2SC3209LK-TP					
J400	1-568-267-21	JACK		Q502 $\Delta$	8-729-043-43	TRANSISTOR 2SC5426-01					
<u>CHIP CONDUCTOR</u>											
JR001	1-216-295-91	SHORT		Q522	8-729-119-76	TRANSISTOR 2SA1048TP-YGR					
JR002	1-216-295-91	SHORT		Q571 $\Delta$	8-729-200-17	TRANSISTOR 2SA10910-TPE2					
<u>COIL</u>											
L001	1-410-470-11	INDUCTOR 10UH		Q601	8-729-119-78	TRANSISTOR 2SC3311A-QRSTA					
L002	1-412-032-11	INDUCTOR CHIP 100UH		Q602	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX					
L003	1-412-032-11	INDUCTOR CHIP 100UH		Q603		VARIANT (SEE VARIANT PARTS LIST)					
L150	1-412-032-11	INDUCTOR CHIP 100UH		Q604	8-729-111-55	TRANSISTOR 2SD1292					
L151	1-412-029-11	INDUCTOR CHIP 10UH		Q605	8-729-423-99	TRANSISTOR 2SD2137-OP-TA					
L160	1-412-029-11	INDUCTOR CHIP 10UH		Q606	8-729-119-78	TRANSISTOR 2SC3311A-QRSTA					
L301	1-412-029-11	INDUCTOR CHIP 10UH		Q650	8-729-111-55	TRANSISTOR 2SD1292					
L302	1-412-029-11	INDUCTOR CHIP 10UH		<u>RESISTOR</u>							
L351	1-412-031-11	INDUCTOR CHIP 47UH		R001	1-249-429-11	CARBON 10K	5%	1/4W			
L352		VARIANT (SEE VARIANT PARTS LIST)		R002	1-249-429-11	CARBON 10K	5%	1/4W			
L503	1-412-553-11	INDUCTOR 3.3MMH		R003	1-216-033-00	RES,CHIP 220	5%	1/10W			
L504	1-412-533-21	INDUCTOR 47UH		R004	1-216-073-00	RES,CHIP 10K	5%	1/10W			
L591 $\Delta$	1-412-531-31	INDUCTOR 33UH		R005	1-247-815-91	CARBON 220	5%	1/4W			
<u>IC LINK</u>											
PS201		VARIANT (SEE VARIANT PARTS LIST)		R007	1-216-025-91	RES,CHIP 100	5%	1/10W			
<u>TRANSISTOR</u>				R008	1-216-033-00	RES,CHIP 220	5%	1/10W			
Q001	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R009	1-247-815-91	CARBON 220	5%	1/4W			
Q002	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R010-011		VARIANT (SEE VARIANT PARTS LIST)					
Q200-201		VARIANT (SEE VARIANT PARTS LIST)		R013	1-247-863-91	CARBON 22K	5%	1/4W			
Q202	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R016	1-249-413-11	CARBON 470	5%	1/4W			
Q203	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R017	1-216-113-00	RES,CHIP 470K	5%	1/10W			
Q204	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R018	1-249-417-11	CARBON 1K	5%	1/4W			
Q205	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R019	1-249-425-11	CARBON 4.7K	5%	1/4W			
Q206-207		VARIANT (SEE VARIANT PARTS LIST)		R020	1-249-427-11	CARBON 6.8K	5%	1/4W			
Q300	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R021	1-249-415-11	CARBON 680	5%	1/4W			
Q301	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R022	1-249-416-11	CARBON 820	5%	1/4W			
Q302	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R023	1-249-421-11	CARBON 2.2K	5%	1/4W			
Q305	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R025	1-249-426-11	CARBON 5.6K	5%	1/4W			
Q350-359		VARIANT (SEE VARIANT PARTS LIST)		R026	1-249-426-11	CARBON 5.6K	5%	1/4W			
Q380		VARIANT (SEE VARIANT PARTS LIST)		R027	1-249-426-11	CARBON 5.6K	5%	1/4W			
Q390	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R028	1-216-049-91	RES,CHIP 1K	5%	1/10W			
Q391	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R030	1-249-429-11	CARBON 10K	5%	1/4W			
Q392	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R031	1-216-045-00	RES,CHIP 680	5%	1/10W			
Q393	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R032	1-216-033-00	RES,CHIP 220	5%	1/10W			
Q394	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R033	1-247-815-91	CARBON 220	5%	1/4W			
				R038	1-216-049-91	RES,CHIP 1K	5%	1/10W			
				R040	1-249-413-11	CARBON 470	5%	1/4W			
				R043	1-249-417-11	CARBON 1K	5%	1/4W			
				R044	1-216-033-00	RES,CHIP 220	5%	1/10W			
				R045	1-216-065-91	RES,CHIP 4.7K	5%	1/10W			
				R046	1-216-033-00	RES,CHIP 220	5%	1/10W			
				R047	1-216-065-91	RES,CHIP 4.7K	5%	1/10W			
				R048	1-216-025-91	RES,CHIP 100	5%	1/10W			



## COMMON PARTS LISTING

Note:

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

Note:

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
R049	1-216-089-91	RES,CHIP	47K	5%	1/10W	R260	1-216-097-91	RES,CHIP	100K	5%	1/10W
R050	1-249-429-11	CARBON	10K	5%	1/4W	R261	1-216-097-91	RES,CHIP	100K	5%	1/10W
R051		VARIANT (SEE VARIANT PARTS LIST)				R262	1-216-025-91	RES,CHIP	100	5%	1/10W
R053		VARIANT (SEE VARIANT PARTS LIST)				R268-269		VARIANT (SEE VARIANT PARTS LIST)			
R054	1-216-073-00	RES,CHIP	10K	5%	1/10W	R280	1-216-022-00	RES,CHIP	75	5%	1/10W
R056	1-249-425-11	CARBON	4.7K	5%	1/4W	R283-284		VARIANT (SEE VARIANT PARTS LIST)			
R057	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R287		VARIANT (SEE VARIANT PARTS LIST)			
R058	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R290	1-216-025-91	RES,CHIP	100	5%	1/10W
R065	1-216-033-00	RES,CHIP	220	5%	1/10W	R300		VARIANT (SEE VARIANT PARTS LIST)			
R066	1-216-033-00	RES,CHIP	220	5%	1/10W	R301	1-216-295-91	SHORT			
R070-072		VARIANT (SEE VARIANT PARTS LIST)				R302-303		VARIANT (SEE VARIANT PARTS LIST)			
R073	1-249-425-11	CARBON	4.7K	5%	1/4W	R304	1-216-073-00	RES,CHIP	10K	5%	1/10W
R074	1-216-073-00	RES,CHIP	10K	5%	1/10W	R306	1-216-675-11	METAL CHIP	10K	1%	1/10W
R075	1-216-073-00	RES,CHIP	10K	5%	1/10W	R307		VARIANT (SEE VARIANT PARTS LIST)			
R076	1-216-121-91	RES,CHIP	1M	5%	1/10W	R310	1-216-049-91	RES,CHIP	1K	5%	1/10W
R077	1-216-097-91	RES,CHIP	100K	5%	1/10W	R312	1-216-033-00	RES,CHIP	220	5%	1/10W
R080-081		VARIANT (SEE VARIANT PARTS LIST)				R313	1-247-815-91	CARBON	220	5%	1/4W
R085	1-216-073-00	RES,CHIP	10K	5%	1/10W	R314	1-247-815-91	CARBON	220	5%	1/4W
R086		VARIANT (SEE VARIANT PARTS LIST)				R315	1-247-815-91	CARBON	220	5%	1/4W
R087	1-216-045-00	RES,CHIP	680	5%	1/10W	R316	1-216-025-91	RES,CHIP	100	5%	1/10W
R088	1-216-045-00	RES,CHIP	680	5%	1/10W	R318	1-216-073-00	RES,CHIP	10K	5%	1/10W
R089	1-216-045-00	RES,CHIP	680	5%	1/10W	R319	1-216-073-00	RES,CHIP	10K	5%	1/10W
R090	1-216-051-00	RES,CHIP	1.2K	5%	1/10W	R320	1-216-073-00	RES,CHIP	10K	5%	1/10W
R091	1-249-429-11	CARBON	10K	5%	1/4W	R321	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R096	1-216-045-00	RES,CHIP	680	5%	1/10W	R322	1-216-073-00	RES,CHIP	10K	5%	1/10W
R099	1-249-425-11	CARBON	4.7K	5%	1/4W	R324	1-249-425-11	CARBON	4.7K	5%	1/4W
R101	1-216-073-00	RES,CHIP	10K	5%	1/10W	R329	1-216-025-91	RES,CHIP	100	5%	1/10W
R150	1-216-025-91	RES,CHIP	100	5%	1/10W	R330	1-216-025-9	RES,CHIP	100	5%	1/10W
R151	1-216-025-91	RES,CHIP	100	5%	1/10W	R331	1-216-025-91	RES,CHIP	100	5%	1/10W
R201	1-216-113-00	RES,CHIP	470K	5%	1/10W	R347	1-216-045-00	RES,CHIP	680	5%	1/10W
R202		VARIANT (SEE VARIANT PARTS LIST)				R350-352		VARIANT (SEE VARIANT PARTS LIST)			
R204-206		VARIANT (SEE VARIANT PARTS LIST)				R353	1-216-295-91	SHORT			
R214-235		VARIANT (SEE VARIANT PARTS LIST)				R354		VARIANT (SEE VARIANT PARTS LIST)			
R237-238		VARIANT (SEE VARIANT PARTS LIST)				R356	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R239	1-247-815-91	CARBON	220	5%	1/4W	R357-370		VARIANT (SEE VARIANT PARTS LIST)			
R240	1-249-417-11	CARBON	1K	5%	1/4W	R372-380		VARIANT (SEE VARIANT PARTS LIST)			
R241		VARIANT (SEE VARIANT PARTS LIST)				R382		VARIANT (SEE VARIANT PARTS LIST)			
R242	1-249-434-11	CARBON	27K	5%	1/4W	R383	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R243	1-216-689-11	RES,CHIP	39K	5%	1/10W	R384	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R246-250		VARIANT (SEE VARIANT PARTS LIST)				R385	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R251	1-216-041-00	RES,CHIP	470	5%	1/10W	R387-388		VARIANT (SEE VARIANT PARTS LIST)			
R252	1-216-041-00	RES,CHIP	470	5%	1/10W	R390	1-216-025-91	RES,CHIP	100	5%	1/10W
R253	1-215-899-11	METAL OXIDE	15K	5%	2W F	R391	1-216-049-91	RES,CHIP	1K	5%	1/10W
R254	1-216-025-91	RES,CHIP	100	5%	1/10W	R392	1-216-025-91	RES,CHIP	100	5%	1/10W
R255	1-216-025-91	RES,CHIP	100	5%	1/10W	R393	1-216-049-91	RES,CHIP	1K	5%	1/10W
R256	1-249-425-11	CARBON	4.7K	5%	1/4W	R394	1-216-025-91	RES,CHIP	100	5%	1/10W
R257	1-216-073-00	RES,CHIP	10K	5%	1/10W	R395-397		VARIANT (SEE VARIANT PARTS LIST)			
R258	1-249-429-11	CARBON	10K	5%	1/4W	R400		VARIANT (SEE VARIANT PARTS LIST)			
R259	1-216-073-00	RES,CHIP	10K	5%	1/10W	R402-404		VARIANT (SEE VARIANT PARTS LIST)			
						R432		VARIANT (SEE VARIANT PARTS LIST)			

**Note:**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Les composants identifies per un trame et une marque  $\Delta$  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.**

## COMMON PARTS LISTING

A

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-13M40/14MB40**

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-13M40/14MB40</b>																	
<u>CAPACITOR</u>																	
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	R508	△ 1-215-863-11	METAL OXIDE	100	5%	1W F						
C312	1-126-933-11	ELECT	100MF	20%	16V	R533	1-215-465-00	METAL	68K	1%	1/4W						
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R534	1-215-449-00	METAL	15K	1%	1/4W						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R551	1-215-870-11	METAL OXIDE	1.5K	5%	1W F						
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R561	1-216-359-00	METAL OXIDE	6.8	5%	1W F						
C418	1-126-964-11	ELECT	10MF	20%	50V	R562	1-216-359-00	METAL OXIDE	6.8	5%	1W F						
C507	△ 1-117-836-11	FILM	6800PF	3%	2KV	R574	1-249-416-11	CARBON	820	5%	1/4W F						
C511	△ 1-119-967-11	FILM	0.43MF	5%	200V	R578	1-215-902-11	METAL OXIDE	47K	5%	2W F						
C551	1-162-114-00	CERAMIC	0.0047MF		2KV	☒ R582	1-208-850-11	RES,CHIP	680K	1%	1/10W						
C591	△ 1-137-350-11	MYLAR	0.015MF	10%	100V	R591	1-215-882-00	METAL OXIDE	22	5%	2W F						
C601	△ 1-136-311-51	FILM	0.47MF	20%	125V	R600	△ 1-219-513-11	CARBON	4.7M	5%	1/2W						
C607	△ 1-117-893-11	ELECT	470MF	20%	250V	R603	△ 1-205-998-11	CEMENTED	1	5%	10W						
C614	△ 1-129-723-00	FILM	0.056MF	5%	630V	R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F						
C699	1-164-645-11	CERAMIC	1000PF	10%	500V	R612	1-216-349-00	METAL OXIDE	1	5%	1W F						
<u>DIODE</u>																	
D002	1-810-039-21	LED UNIT				R613	1-216-349-00	METAL OXIDE	1	5%	1W F						
D215	8-719-110-17	DIODE MTZJ-T-77-10B				R615	1-247-893-11	CARBON	390K	5%	1/4W						
D551	8-719-028-72	DIODE RGP02-17PKG23				R618	1-212-857-00	FUSIBLE	10	5%	1/4W F						
<u>FUSE</u>																	
F601	△ 1-533-795-11	LINK, FUSE				R623	1-249-441-11	CARBON	100K	5%	1/4W						
<u>IC</u>																	
IC301	8-752-083-09	IC CXA2061S				R636	1-208-794-11	RES,CHIP	3.3K	1%	1/10W						
IC400	8-759-490-18	IC TDA7056B/N1				R691	1-247-791-91	CARBON	22	5%	1/4W						
<u>JACK</u>																	
J201	1-580-441-71	JACK, PIN 2P				R692	1-247-791-91	CARBON	22	5%	1/4W						
<u>IC LINK</u>																	
PS201	1-532-637-00	LINK, IC				<u>RELAY</u>											
<u>RESISTOR</u>																	
R231	1-216-073-00	RES,CHIP	10K	5%	1/10W	RY601	△ 1-755-146-11	RELAY, AC POWER									
R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	<u>SWITCH</u>											
R246	1-216-295-91	SHORT				S001	1-571-532-21	SWITCH, TACTILE									
R269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	S002	1-571-532-21	SWITCH, TACTILE									
R284	1-216-295-91	SHORT				S003	1-571-532-21	SWITCH, TACTILE									
R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	S004	1-571-532-21	SWITCH, TACTILE									
R400	1-249-438-11	CARBON	56K	5%	1/4W	S005	1-571-532-21	SWITCH, TACTILE									
R432	1-247-863-91	CARBON	22K	5%	1/4W	S006	1-571-532-21	SWITCH, TACTILE									
R502	△ 1-215-924-00	METAL OXIDE	15K	5%	3W F	<u>TRANSFORMER</u>											
<u>THERMISTOR</u>																	
THP601 1-810-597-11 THERMISTOR, POSITIVE																	
<u>TUNER</u>																	
TU101 △ 8-598-430-00 TUNER, FSS BTF-FA401																	
<u>VARISTOR</u>																	
VDR601△ 1-809-267-41 VARISTOR ERZV10D471																	
VDR602 1-809-267-41 VARISTOR ERZV10D471																	

# A

## BOARD VARIANT PARTS LIST

### Note:

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

### Note:

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-14MB40C**

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-14MB40C</b>																	
<u>CAPACITOR</u>																	
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	R533	1-215-465-00	METAL	68K	1%	1/4W						
C312	1-126-933-11	ELECT	100MF	20%	16V	R534	1-215-449-00	METAL	15K	1%	1/4W						
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R551	1-215-870-11	METAL OXIDE	1.5K	5%	1W F						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R561	1-216-359-00	METAL OXIDE	6.8	5%	1W F						
C359	8-719-158-15	DIODE UDV-TE-17-5.6B				R562	1-216-359-00	METAL OXIDE	6.8	5%	1W F						
C418	1-126-964-11	ELECT	10MF	20%	50V	R574	1-249-416-11	CARBON	820	5%	1/4 F						
C507 Δ	1-117-836-11	FILM	6800PF	3%	2KV	R578	1-215-902-11	METAL OXIDE	47K	5%	2W F						
C511 Δ	1-119-967-11	FILM	0.43MF	5%	200V	☒ R582	1-208-850-11	RES,CHIP	680K	1%	1/10W						
C551	1-162-114-00	CERAMIC	0.0047MF		2KV	R591	1-215-882-00	METAL OXIDE	22	5%	2W F						
C591 Δ	1-137-350-11	MYLAR	0.015MF	10%	100V	R601 Δ	1-247-289-00	CARBON	8.2M	5%	1W						
C601 Δ	1-136-311-61	FILM	0.47MF	20%	300V	R603	1-202-962-11	CEMENTED	3.3	5%	10W						
C607 Δ	1-125-731-11	ELECT(BLOCK)	270MF	20%	400V	R604	1-247-889-00	CARBON	270K	5%	1/4W						
C614 Δ	1-137-347-11	FILM	0.022MF	3%	2KV	R605	1-247-889-00	CARBON	270K	5%	1/4W						
<u>DIODE</u>																	
D002	1-810-039-21	LED UNIT				R606	1-220-926-11	FUSIBLE	0.47	10%	1/2 F						
D215	8-719-110-17	DIODE MTZJ-T-77-10B				R612	1-216-357-00	METAL OXIDE	4.7	5%	1W F						
D551	8-719-028-72	DIODE RGP02-17PKG23				R613	1-216-357-00	METAL OXIDE	4.7	5%	1W F						
<u>FUSE</u>																	
F601 Δ	1-532-506-51	FUSE				R618	1-212-942-00	FUSIBLE	2.2	5%	1/2 F						
<u>IC</u>																	
IC301	8-752-083-09	IC CXA2061S				R623	1-249-437-11	CARBON	47K	5%	1/4W						
IC400	8-759-490-18	IC TDA7056B/N1				R636	1-208-794-11	RES,CHIP	3.3K	1%	1/10W						
<u>JACK</u>																	
J201	1-580-441-71	JACK, PIN 2P				R691	1-249-399-11	CARBON	33	5%	1/4W						
<u>IC LINK</u>																	
PS201	1-532-637-00	LINK, IC				R692	1-249-399-11	CARBON	33	5%	1/4W						
<u>RESISTOR</u>																	
R231	1-216-073-00	RES,CHIP	10K	5%	1/10W	<u>SWITCH</u>											
R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	S001	1-571-532-21	SWITCH, TACTILE									
R246	1-216-295-91	SHORT				S002	1-571-532-21	SWITCH, TACTILE									
R269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	S003	1-571-532-21	SWITCH, TACTILE									
R284	1-216-295-91	SHORT				S004	1-571-532-21	SWITCH, TACTILE									
R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	S005	1-571-532-21	SWITCH, TACTILE									
R400	1-249-438-11	CARBON	56K	5%	1/4W	S006	1-571-532-21	SWITCH, TACTILE									
R432	1-247-863-91	CARBON	22K	5%	1/4W	<u>TRANSFORMER</u>											
R502 Δ	1-215-924-00	METAL OXIDE	15K	5%	3W F	T504 Δ	1-453-210-11	TRANSFORMER ASSY, FLYBACK (NX-1731//X4E4)									
R508 Δ	1-215-863-11	METAL OXIDE	100	5%	1W F	T603 Δ	1-431-675-11	TRANSFORMER, CONVERTER (PIT)									
<u>THERMISTOR</u>																	
THP601 1-806-165-12 THERMISTOR (POSITIVE)																	
<u>TUNER</u>																	
TU101 Δ 8-598-430-00 TUNER, FSS BTF-FA401																	
<u>VARISTOR</u>																	
VDR601 Δ 1-809-267-41 VARISTOR ERZV10D471																	
VDR602 1-809-267-41 VARISTOR ERZV10D471																	

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-14MB40A**

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-14MB40A</b>																	
<u>CAPACITOR</u>																	
C204	1-107-698-11	ELECT	10MF	20%	25V	R072	1-247-815-91	CARBON	220	5%	1/4W						
C205	1-126-960-11	ELECT	1MF	20%	50V	R081	1-249-413-11	CARBON	470	5%	1/4W						
C300	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C302	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C309	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	R205	1-247-895-91	CARBON	470K	5%	1/4W						
C312	1-126-933-11	ELECT	100MF	20%	16V	R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C320	1-126-957-11	ELECT	0.22MF	20%	50V	R235	1-216-057-00	RES,CHIP	2.2K	5%	10W						
C321	1-163-259-91	CERAMIC CHIP	220PF	5%	50V	R246	1-216-295-91	SHORT									
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R269	1-216-057-00	RES,CHIP	2.2K	5%	110W						
C418	1-126-964-11	ELECT	10MF	20%	50V	R284	1-216-295-91	SHORT									
C507	△ 1-117-836-11	FILM	6800PF	3%	2KV	R300	1-216-295-91	SHORT									
C511	△ 1-119-967-11	FILM	0.43MF	5%	200V	R302	1-216-295-91	SHORT									
C551	1-162-114-00	CERAMIC	0.0047MF		2KV	R307	1-216-077-00	RES,CHIP	15K	5%	110W						
C591	△ 1-137-350-11	MYLAR	0.015MF	10%	100V	R400	1-249-438-11	CARBON	56K	5%	1/4W						
C601	△ 1-136-311-61	FILM	0.47MF	20%	300V	R432	1-247-863-91	CARBON	22K	5%	1/4W						
C607	△ 1-125-731-11	ELECT(BLOCK)	270MF	20%	400V	R502	△ 1-215-924-00	METAL OXIDE	15K	5%	3W F						
C614	△ 1-137-347-11	FILM	0.022MF	3%	2KV	R508	△ 1-215-863-11	METAL OXIDE	100	5%	1W F						
<u>DIODE</u>																	
D002	1-810-039-11	LED UNIT				R533	1-215-465-00	METAL	68K	1%	1/4W						
D203	8-719-110-17	DIODE MTZJ-T-77-10B				R534	1-215-449-00	METAL	15K	1%	1/4W						
D209	8-719-110-17	DIODE MTZJ-T-77-10B				R551	1-215-870-11	METAL OXIDE	1.5K	5%	1W F						
D215	8-719-110-17	DIODE MTZJ-T-77-10B				R561	1-216-359-00	METAL OXIDE	6.8	5%	1W F						
D551	8-719-028-72	DIODE RGP02-17PKG23				R562	1-216-359-00	METAL OXIDE	6.8	5%	1W F						
<u>FUSE</u>																	
F601	△ 1-532-506-51	FUSE				R574	1-249-416-11	CARBON	820	5%	1/4W F						
<u>IC</u>																	
IC301	8-752-082-35	IC CXA2060AS				R578	1-215-902-11	METAL OXIDE	47K	5%	2W F						
IC400	8-759-490-18	IC TDA7056B/N1				▀ R582	1-208-850-11	RES,CHIP	680K	1%	1/10W						
<u>JACK</u>																	
J201	1-580-441-71	JACK, PIN 2P				R591	1-215-882-00	METAL OXIDE	22	5%	2W F						
J202	1-580-441-41	JACK, PIN 2P				R601	△ 1-247-289-00	CARBON	8.2M	5%	1W						
<u>IC LINK</u>																	
PS201	1-532-637-00	LINK, IC				R603	△ 1-202-962-11	CEMENTED	3.3	5%	10W						
<u>RELAY</u>																	
RY601 △ 1-755-146-11 RELAY, AC POWER																	

**A**

## BOARD VARIANT PARTS LIST

**Note:**

The components identified with shading and a critical symbol (  $\Delta$  ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-14MB40A**

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<b><u>SWITCH</u></b>							
S001	1-571-532-21	SWITCH, TACTILE					
S002	1-571-532-21	SWITCH, TACTILE					
S003	1-571-532-21	SWITCH, TACTILE					
S004	1-571-532-21	SWITCH, TACTILE					
S005	1-571-532-21	SWITCH, TACTILE					
S006	1-571-532-21	SWITCH, TACTILE					
<b><u>TRANSFORMER</u></b>							
T504	$\Delta$ 1-453-210-11	TRANSFORMER ASSY, FLYBACK (NX-1731//X4E4)					
T603	$\Delta$ 1-431-675-11	TRANSFORMER, CONVERTER (PIT)					
<b><u>THERMISTOR</u></b>							
THP601	1-806-165-12	THERMISTOR (POSITIVE)					
<b><u>TUNER</u></b>							
TU101	$\Delta$ 8-598-430-00	TUNER, FSS BTF-FA401					
<b><u>VARISTOR</u></b>							
VDR601	$\Delta$ 1-809-267-41	VARISTOR ERZV10D471					
VDR602	1-809-267-41	VARISTOR ERZV10D471					
<b><u>CRYSTAL</u></b>							
X300	1-579-972-11	VIBRATOR, CRYSTAL					
X302	1-579-973-11	VIBRATOR, CRYSTAL					

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-20M40/21MB40P/21MB40M**

## Note:

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

## Note:

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-20M40/21MB40P/21MB40M</b>																	
<b>CAPACITOR</b>																	
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	R072	1-247-815-91	CARBON	220	5%	1/4W						
C204	1-107-698-11	ELECT	10MF	20%	25V	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C205	1-126-960-11	ELECT	1MF	20%	50V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	R205	1-247-895-91	CARBON	470K	5%	1/4W						
C312	1-126-942-61	ELECT	1000MF	20%	25V	R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R246	1-216-295-91	SHORT									
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C418	1-126-964-11	ELECT	10MF	20%	50V	R284	1-216-295-91	SHORT									
C505	△ 1-162-115-00	CERAMIC	330PF	10%	2KV	R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
C507	△ 1-119-865-11	MYLAR	5700PF	3%	2KV	R400	1-249-438-11	CARBON	56K	5%	1/4W						
C511	△ 1-117-665-11	FILM	0.33MF	5%	200V	R432	1-247-863-91	CARBON	22K	5%	1/4W						
C591	△ 1-137-150-11	MYLAR	0.01MF	10%	100V	R502	△ 1-215-923-00	METAL OXIDE	10K	5%	3W F						
C601	△ 1-136-311-51	FILM	0.47MF	20%	125V	R508	△ 1-215-864-00	METAL OXIDE	150	5%	1W F						
C607	△ 1-117-941-11	ELECT(BLOCK)	470MF	20%	250V	R533	1-215-461-00	METAL	47K	1%	1/4W						
C614	△ 1-129-723-00	FILM	0.056MF	5%	630V	R534	1-215-453-00	METAL	22K	1%	1/4W						
C625	1-126-960-11	ELECT	1MF	20%	50V	R561	1-216-349-00	METAL OXIDE	1	5%	1W F						
C699	1-164-645-11	CERAMIC	1000PF	10%	500V	R562	1-216-349-00	METAL OXIDE	1	5%	1W F						
<b>DIODE</b>																	
D002	1-810-039-21	LED UNIT				R574	1-249-417-11	CARBON	1K	5%	1/4W F						
D203	8-719-110-17	DIODE MTZJ-T-77-10B				R578	1-216-467-11	METAL OXIDE	56K	5%	2W F						
D209	8-719-110-17	DIODE MTZJ-T-77-10B				■ R582	1-208-826-11	RES,CHIP	68K	1%	1/10W						
D215	8-719-110-17	DIODE MTZJ-T-77-10B				R591	1-215-880-00	METAL OXIDE	10	5%	2W F						
D619	8-719-991-33	DIODE 1SS133T-77				R600	△ 1-219-513-11	CARBON	4.7M	5%	1/2W						
<b>FUSE</b>																	
F601	△ 1-533-795-11	LINK, FUSE				R603	△ 1-205-998-11	CEMENTED	1	5%	10W						
<b>IC</b>																	
IC301	8-752-083-09	IC CXA2061S				R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F						
IC400	8-759-490-18	IC TDA7056B/N1				R612	1-216-349-00	METAL OXIDE	1	5%	1W F						
<b>JACK</b>																	
J201	1-580-441-71	JACK, PIN 2P				R613	1-216-349-00	METAL OXIDE	1	5%	1W F						
J202	1-580-441-41	JACK, PIN 2P				R615	1-247-893-11	CARBON	390K	5%	1/4W						
<b>IC LINK</b>																	
PS201	1-532-637-00	LINK, IC				R618	1-212-857-00	FUSIBLE	10	5%	1/4W F						
<b>TRANSISTOR</b>																	
Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA				R623	1-249-441-11	CARBON	100K	5%	1/4W						
<b>RELAY</b>																	
RY601 △ 1-755-018-11 RELAY																	
<b>SWITCH</b>																	
S001	1-692-431-21	SWITCH, TACTILE				S002	1-692-431-21	SWITCH, TACTILE									
S002	1-692-431-21	SWITCH, TACTILE				S003	1-692-431-21	SWITCH, TACTILE									

**A**

## BOARD VARIANT PARTS LIST

## Note:

The components identified with shading and a critical symbol (  $\Delta$  ) are critical for safety. Replace only with part number specified.

## Note:

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-20M40/21MB40P/21MB40M**

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
S004	1-692-431-21	SWITCH, TACTILE					
S005	1-692-431-21	SWITCH, TACTILE					
S006	1-692-431-21	SWITCH, TACTILE					
S007	1-692-431-21	SWITCH, TACTILE					
<b><u>TRANSFORMER</u></b>							
T504	$\Delta$ 1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)					
T603	$\Delta$ 1-431-674-11	TRANSFORMER, CONVERTER (PIT)					
<b><u>THERMISTOR</u></b>							
THP601	1-810-597-11	THERMISTOR, POSITIVE					
<b><u>TUNER</u></b>							
TU101	$\Delta$ 8-598-430-00	TUNER, FSS BTF-FA401					
<b><u>VARISTOR</u></b>							
VDR601	$\Delta$ 1-801-074-41	VARISTOR ERZ10D271					
VDR602	1-801-074-41	VARISTOR ERZ10D271					

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21MB40C**

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-21MB40C</b>																	
<b>CAPACITOR</b>																	
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	R072	1-247-815-91	CARBON	220	5%	1/4W						
C204	1-107-698-11	ELECT	10MF	20%	25V	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C205	1-126-960-11	ELECT	1MF	20%	50V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	R205	1-247-895-91	CARBON	470K	5%	1/4W						
C312	1-126-942-61	ELECT	1000MF	20%	25V	R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R246	1-216-295-91	SHORT									
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C418	1-126-964-11	ELECT	10MF	20%	50V	R284	1-216-295-91	SHORT									
<b>C505</b> Δ 1-162-115-00	<b>CERAMIC</b>	<b>330PF</b>	<b>10%</b>	<b>2KV</b>		R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
C507	Δ 1-119-865-11	MYLAR	5700PF	3%	2KV	R400	1-249-438-11	CARBON	56K	5%	1/4W						
C511	Δ 1-117-665-11	FILM	0.33MF	5%	200V	R432	1-247-863-91	CARBON	22K	5%	1/4W						
C591	Δ 1-137-150-11	MYLAR	0.01MF	10%	100V	<b>R502</b> Δ 1-215-923-00	METAL OXIDE	10K	5%	3W F							
C601	Δ 1-136-311-61	FILM	0.47MF	20%	300V	<b>R508</b> Δ 1-215-864-00	METAL OXIDE	150	5%	1W F							
C607	Δ 1-125-731-11	ELECT(BLOCK)	270MF	20%	400V	R533	1-215-461-00	METAL	47K	1%	1/4W						
<b>C614</b> Δ 1-137-347-11	<b>FILM</b>	<b>0.022MF</b>	<b>3%</b>	<b>2KV</b>		R534	1-215-453-00	METAL	22K	1%	1/4W						
C625	1-126-960-11	ELECT	1MF	20%	50V	R561	1-216-349-00	METAL OXIDE	1	5%	1W F						
<b>DIODE</b>																	
D002	1-810-039-21	LED UNIT				R562	1-216-349-00	METAL OXIDE	1	5%	1W F						
D203	8-719-110-17	DIODE MTZJ-T-77-10B				R574	1-249-417-11	CARBON	1K	5%	1/4W F						
D209	8-719-110-17	DIODE MTZJ-T-77-10B				R578	1-216-467-11	METAL OXIDE	56K	5%	2W F						
D215	8-719-110-17	DIODE MTZJ-T-77-10B				<b>R582</b>	1-208-826-11	RES,CHIP	68K	1%	1/10W						
D619	8-719-991-33	DIODE 1SS133T-77				R591	1-215-880-00	METAL OXIDE	10	5%	2W F						
<b>FUSE</b>																	
<b>F601</b> Δ 1-532-506-51	<b>FUSE</b>					R601	Δ 1-247-289-00	CARBON	8.2M	5%	1W						
<b>IC</b>																	
IC301	8-752-083-09	IC CXA2061S				R603	Δ 1-202-962-11	CEMENTED	3.3	5%	10W						
IC400	8-759-490-18	IC TDA7056B/N1				R604	1-247-889-00	CARBON	270K	5%	1/4W						
<b>JACK</b>																	
J201	1-580-441-71	JACK, PIN 2P				R605	1-247-889-00	CARBON	270K	5%	1/4W						
J202	1-580-441-41	JACK, PIN 2P				R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F						
<b>IC LINK</b>																	
PS201	1-532-637-00	LINK, IC				R612	1-216-357-00	METAL OXIDE	4.7	5%	1W F						
<b>TRANSISTOR</b>																	
Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA				R613	1-216-357-00	METAL OXIDE	4.7	5%	1W F						
<b>RELAY</b>																	
RY601 Δ 1-755-018-11 RELAY																	
<b>SWITCH</b>																	
S001	1-692-431-21	SWITCH, TACTILE															
S002	1-692-431-21	SWITCH, TACTILE															
S003	1-692-431-21	SWITCH, TACTILE															

**A****BOARD VARIANT PARTS LIST****Note:**

The components identified with shading and a critical symbol (  $\Delta$  ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-21MB40C**

<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>	<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
S004	1-692-431-21	SWITCH, TACTILE					
S005	1-692-431-21	SWITCH, TACTILE					
S006	1-692-431-21	SWITCH, TACTILE					
S007	1-692-431-21	SWITCH, TACTILE					
<b><u>TRANSFORMER</u></b>							
T504	$\Delta$ 1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)					
T603	$\Delta$ 1-431-675-11	TRANSFORMER, CONVERTER (PIT)					
<b><u>THERMISTOR</u></b>							
THP601	1-809-827-11	THERMISTOR, POSITIVE					
<b><u>TUNER</u></b>							
TU101	$\Delta$ 8-598-430-00	TUNER, FSS BTF-FA401					
<b><u>VARISTOR</u></b>							
VDR601	$\Delta$ 1-809-267-41	VARISTOR ERZV10D471					
VDR602	1-809-267-41	VARISTOR ERZV10D471					

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## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21SE40**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK									
<b>A BOARD VARIANT LIST: KV-21SE40</b>																		
<u>CAPACITOR</u>																		
C202	1-126-960-11	ELECT	1MF	20%	50V	IC200	8-759-450-93	IC NJM2521M-TE1										
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	IC301	8-752-083-09	IC CXA2061S										
C204	1-107-698-11	ELECT	10MF	20%	25V	IC401	8-759-490-17	IC TDA7057AQ/N2										
C205	1-126-960-11	ELECT	1MF	20%	50V	<u>JACK</u>												
C206	1-126-960-11	ELECT	1MF	20%	50V	J201	1-580-443-21	JACK, PIN 3P										
C214	1-126-957-11	ELECT	0.22MF	20%	50V	J202	1-691-110-11	JACK, PIN 3P										
C216	1-126-959-11	ELECT	0.47MF	20%	50V	<u>IC LINK</u>												
C220	1-126-941-11	ELECT	470MF	20%	25V	PS201	1-532-984-11	LINK, IC										
C233	1-126-960-11	ELECT	1MF	20%	50V	<u>TRANSISTOR</u>												
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA										
C312	1-126-942-61	ELECT	1000MF	20%	25V	<u>RESISTOR</u>												
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R010	1-216-033-00	RES,CHIP	220	5%	110W							
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R011	1-247-815-91	CARBON	220	5%	1/4W							
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R051	1-216-033-00	RES,CHIP	220	5%	1/10W							
C418	1-126-964-11	ELECT	10MF	20%	50V	R070	1-249-425-11	CARBON	4.7K	5%	1/4W							
C505 $\Delta$	1-162-115-00	CERAMIC	330PF	10%	2KV	R071	1-249-425-11	CARBON	4.7K	5%	1/4W							
C507 $\Delta$	1-119-865-11	MYLAR	5700PF	3%	2KV	R072	1-247-815-91	CARBON	220	5%	1/4W							
C511 $\Delta$	1-117-665-11	FILM	0.33MF	5%	200V	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W							
C591 $\Delta$	1-137-150-11	MYLAR	0.01MF	10%	100V	R202	1-216-113-00	RES,CHIP	470K	5%	1/10W							
C601 $\Delta$	1-136-311-51	FILM	0.47MF	20%	125V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W							
C607 $\Delta$	1-117-941-11	ELECT(BLOCK)	470MF	20%	250V	R205	1-247-895-91	CARBON	470K	5%	1/4W							
C614 $\Delta$	1-129-723-00	FILM	0.056MF	5%	630V	R206	1-247-895-91	CARBON	470K	5%	1/4W							
C625	1-126-960-11	ELECT	1MF	20%	50V	R230	1-216-073-00	RES,CHIP	10K	5%	1/10W							
C699	1-164-645-11	CERAMIC	1000PF	10%	500V	R231	1-216-073-00	RES,CHIP	10K	5%	1/10W							
<u>CONNECTOR</u>																		
CN401	1-564-505-11	PLUG, CONNECTOR 2P				R234	1-216-057-00	RES,CHIP	2.2K	5%	1/10W							
<u>DIODE</u>																		
D002	1-810-039-21	LED UNIT				R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W							
D202	8-719-110-17	DIODE MTZJ-T-77-10B				R237	1-247-815-91	CARBON	220	5%	1/4W							
D203	8-719-110-17	DIODE MTZJ-T-77-10B				R238	1-249-417-11	CARBON	1K	5%	1/4W							
D204	8-719-110-17	DIODE MTZJ-T-77-10B				R241	1-216-065-91	RES,CHIP	4.7K	5%	1/10W							
D209	8-719-110-17	DIODE MTZJ-T-77-10B				R268	1-216-065-91	RES,CHIP	4.7K	5%	1/10W							
D619	8-719-991-33	DIODE 1SS133T-77				R269	1-216-065-91	RES,CHIP	4.7K	5%	1/10W							
<u>FUSE</u>																		
F601 $\Delta$	1-533-795-11	LINK, FUSE				R284	1-216-295-91	SHORT										



## BOARD VARIANT PARTS LIST

## Note:

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

## Note:

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-21SE40**

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK
R508	△ 1-215-864-00	METAL OXIDE	150	5%	1W	F			<u>TUNER</u>
R533	1-215-461-00	METAL	47K	1%	1/4W				
R534	1-215-453-00	METAL	22K	1%	1/4W				
R561	1-216-349-00	METAL OXIDE	1	5%	1W	F			
R562	1-216-349-00	METAL OXIDE	1	5%	1W	F			
R574	1-249-417-11	CARBON	1K	5%	1/4W	F			
R578	1-216-467-11	METAL OXIDE	56K	5%	2W	F			
☒ R582	1-208-826-11	RES,CHIP	68K	1%	1/10W				
R591	1-215-880-00	METAL OXIDE	10	5%	2W	F			
R600	△ 1-219-513-11	CARBON	4.7M	5%	1/2W				
R601	△ 1-247-289-00	CARBON	8.2M	5%	1W				
R603	△ 1-202-962-11	CEMENTED	3.3	5%	10W				
R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W	F			
R612	1-216-357-00	METAL OXIDE	4.7	5%	1W	F			
R613	1-216-357-00	METAL OXIDE	4.7	5%	1W	F			
R615	1-247-893-11	CARBON	390K	5%	1/4W				
R618	1-212-942-00	FUSIBLE	2.2	5%	1/2W	F			
R623	1-249-437-11	CARBON	47K	5%	1/4W				
R627	1-249-441-11	CARBON	100K	5%	1/4W				
R628	1-249-425-11	CARBON	4.7K	5%	1/4W				
R629	1-247-807-31	CARBON	100	5%	1/4W				
R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W				
R691	1-249-399-11	CARBON	33	5%	1/4W				
R692	1-249-399-11	CARBON	33	5%	1/4W				
<u>RELAY</u>									
RY601	△ 1-755-018-11	RELAY							
<u>SWITCH</u>									
S001	1-692-431-21	SWITCH, TACTILE							
S002	1-692-431-21	SWITCH, TACTILE							
S003	1-692-431-21	SWITCH, TACTILE							
S004	1-692-431-21	SWITCH, TACTILE							
005	1-692-431-21	SWITCH, TACTILE							
S006	1-692-431-21	SWITCH, TACTILE							
S007	1-692-431-21	SWITCH, TACTILE							
<u>TRANSFORMER</u>									
T504	△ 1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)							
T603	△ 1-431-675-11	TRANSFORMER, CONVERTER (PIT)							
<u>THERMISTOR</u>									
THP601	1-809-827-11	THERMISTOR, POSITIVE							

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-20S40/20S41**

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-20S40/20S41</b>																	
<u>CAPACITOR</u>																	
C202	1-126-960-11	ELECT	1MF	20%	50V	IC200	8-759-450-93	IC NJM2521M-TE1									
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	IC301	8-752-083-09	IC CXA2061S									
C204	1-107-698-11	ELECT	10MF	20%	25V	IC401	8-759-490-17	IC TDA7057AQ/N2									
C205	1-126-960-11	ELECT	1MF	20%	50V	<u>JACK</u>											
C206	1-126-960-11	ELECT	1MF	20%	50V	J201	1-580-443-21	JACK, PIN 3P									
C214	1-126-957-11	ELECT	0.22MF	20%	50V	J202	1-691-110-11	JACK, PIN 3P									
C216	1-126-959-11	ELECT	0.47MF	20%	50V	<u>LINK</u>											
C220	1-126-941-11	ELECT	470MF	20%	25V	PS201	1-532-984-11	LINK, IC									
C233	1-126-960-11	ELECT	1MF	20%	50V	<u>TRANSISTOR</u>											
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA									
<u>RESISTOR</u>																	
C312	1-126-942-61	ELECT	1000MF	20%	25V	R010	1-216-033-00	RES,CHIP	220	5%	1/10W						
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R011	1-247-815-91	CARBON	220	5%	1/4W						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R051	1-216-033-00	RES,CHIP	220	5%	1/10W						
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R070	1-249-425-11	CARBON	4.7K	5%	1/4W						
C418	1-126-964-11	ELECT	10MF	20%	50V	R071	1-249-425-11	CARBON	4.7K	5%	1/4W						
C505	△ 1-162-115-00	CERAMIC	330PF	10%	2KV	R072	1-247-815-91	CARBON	220	5%	1/4W						
C507	△ 1-119-865-11	MYLAR	5700PF	3%	2KV	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C511	△ 1-117-665-11	FILM	0.33MF	5%	200V	R202	1-216-113-00	RES,CHIP	470K	5%	1/10W						
C591	△ 1-137-150-11	MYLAR	0.01MF	10%	100V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C601	△ 1-136-311-51	FILM	0.47MF	20%	125V	R205	1-247-895-91	CARBON	470K	5%	1/4W						
<u>CONNECTOR</u>																	
CN401	1-564-505-11	PLUG, CONNECTOR 2P				R206	1-247-895-91	CARBON	470K	5%	1/4W						
<u>DIODE</u>																	
D002	1-810-039-21	LED UNIT				R230	1-216-073-00	RES,CHIP	10K	5%	1/10W						
D202	8-719-110-17	DIODE MTZJ-T-77-10B				R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
D203	8-719-110-17	DIODE MTZJ-T-77-10B				R234	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
D204	8-719-110-17	DIODE MTZJ-T-77-10B				R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
D209	8-719-110-17	DIODE MTZJ-T-77-10B				R237	1-247-815-91	CARBON	220	5%	1/4W						
D619	8-719-991-33	DIODE 1SS133T-77				R238	1-249-417-11	CARBON	1K	5%	1/4W						
<u>FUSE</u>																	
F601	△ 1-533-795-11	LINK, FUSE				R241	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
						R268	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
						R269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
						R284	1-216-295-91	SHORT									
						R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
						R400	1-247-863-91	CARBON	22K	5%	1/4W						
						R432	1-249-429-11	CARBON	10K	5%	1/4W						
						R502	△ 1-215-923-00	METAL OXIDE	10K	5%	3W F						

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-20S40/20S41**

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK
R508 Δ	1-215-864-00	METAL OXIDE	150	5%	1W	F			<u>TUNER</u>
R533	1-215-461-00	METAL	47K	1%	1/4W				
R534	1-215-453-00	METAL	22K	1%	1/4W				
R561	1-216-349-00	METAL OXIDE	1	5%	1W	F			
R562	1-216-349-00	METAL OXIDE	1	5%	1W	F			
R574	1-249-417-11	CARBON	1K	5%	1/4W	F			
R578	1-216-467-11	METAL OXIDE	56K	5%	2W	F			
☒ R582	1-208-826-11	RES,CHIP	68K	1%	1/10W				
R591	1-215-880-00	METAL OXIDE	10	5%	2W	F			
R600 Δ	1-219-513-11	CARBON	4.7M	5%	1/2W				
R603 Δ	1-205-998-11	CEMENTED	1	5%	10W				
R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W	F			
R612	1-216-349-00	METAL OXIDE	1	5%	1W	F			
R613	1-216-349-00	METAL OXIDE	1	5%	1W	F			
R615	1-247-893-11	CARBON	390K	5%	1/4W				
R618	1-212-857-00	FUSIBLE	10	5%	1/4W	F			
R623	1-249-441-11	CARBON	100K	5%	1/4W				
R627	1-249-441-11	CARBON	100K	5%	1/4W				
R628	1-249-425-11	CARBON	4.7K	5%	1/4W				
R629	1-247-807-31	CARBON	100	5%	1/4W				
R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W				
R691	1-247-791-91	CARBON	22	5%	1/4W				
R692	1-247-791-91	CARBON	22	5%	1/4W				
<u>RELAY</u>									
RY601 Δ 1-755-018-11 RELAY									
<u>SWITCH</u>									
S001	1-692-431-21	SWITCH, TACTILE							
S002	1-692-431-21	SWITCH, TACTILE							
S003	1-692-431-21	SWITCH, TACTILE							
S004	1-692-431-21	SWITCH, TACTILE							
S005	1-692-431-21	SWITCH, TACTILE							
S006	1-692-431-21	SWITCH, TACTILE							
S007	1-692-431-21	SWITCH, TACTILE							
<u>TRANSFORMER</u>									
T504 Δ 1-453-211-11 TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)									
T603 Δ 1-431-674-11 TRANSFORMER, CONVERTER (PIT)									
<u>THERMISTOR</u>									
THP601 1-810-597-11 THERMISTOR, POSITIVE									

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21SE40C**

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-21SE40C</b>																	
<b>CAPACITOR</b>																	
C202	1-126-960-11	ELECT	1MF	20%	50V	IC200	8-759-450-93	IC NJM2521M-TE1									
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	IC301	8-752-083-09	IC CXA2061S									
C204	1-107-698-11	ELECT	10MF	20%	25V	IC401	8-759-490-17	IC TDA7057AQ/N2									
C205	1-126-960-11	ELECT	1MF	20%	50V	<b>JACK</b>											
C206	1-126-960-11	ELECT	1MF	20%	50V	J201	1-580-443-21	JACK, PIN 3P									
C214	1-126-957-11	ELECT	0.22MF	20%	50V	J202	1-691-110-11	JACK, PIN 3P									
C216	1-126-959-11	ELECT	0.47MF	20%	50V	<b>IC LINK</b>											
C220	1-126-941-11	ELECT	470MF	20%	25V	PS201	1-532-984-11	LINK, IC									
C233	1-126-960-11	ELECT	1MF	20%	50V	<b>TRANSISTOR</b>											
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA									
C312	1-126-942-61	ELECT	1000MF	20%	25V	<b>RESISTOR</b>											
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R010	1-216-033-00	RES,CHIP	220	5%	1/10W						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R011	1-247-815-91	CARBON	220	5%	1/4W						
C359	8-719-158-15	DIODE UDVZ-TE-17-5.6B				R051	1-216-033-00	RES,CHIP	220	5%	1/10W						
C418	1-126-964-11	ELECT	10MF	20%	50V	R070	1-249-425-11	CARBON	4.7K	5%	1/4W						
C505	Δ 1-162-115-00	CERAMIC	330PF	10%	2KV	R071	1-249-425-11	CARBON	4.7K	5%	1/4W						
C507	Δ 1-119-865-11	MYLAR	5700PF	3%	2KV	R072	1-247-815-91	CARBON	220	5%	1/4W						
C511	Δ 1-117-665-11	FILM	0.33MF	5%	200V	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C591	Δ 1-137-150-11	MYLAR	0.01MF	10%	100V	R202	1-216-113-00	RES,CHIP	470K	5%	1/10W						
C601	Δ 1-136-311-61	FILM	0.47MF	20%	300V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C607	Δ 1-125-731-11	ELECT(BLOCK)	270MF	20%	400V	R205	1-247-895-91	CARBON	470K	5%	1/4W						
C614	Δ 1-137-347-11	FILM	0.022MF	3%	2KV	R206	1-247-895-91	CARBON	470K	5%	1/4W						
C625	1-126-960-11	ELECT	1MF	20%	50V	R230	1-216-073-00	RES,CHIP	10K	5%	1/10W						
<b>CONNECTOR</b>																	
CN401	1-564-505-11	PLUG, CONNECTOR 2P				R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
<b>DIODE</b>																	
D002	1-810-039-21	LED UNIT				R234	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
D202	8-719-110-17	DIODE MTZJ-T-77-10B				R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
D203	8-719-110-17	DIODE MTZJ-T-77-10B				R237	1-247-815-91	CARBON	220	5%	1/4W						
D204	8-719-110-17	DIODE MTZJ-T-77-10B				R238	1-249-417-11	CARBON	1K	5%	1/4W						
D209	8-719-110-17	DIODE MTZJ-T-77-10B				R241	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
D619	8-719-991-33	DIODE 1SS133T-77				R268	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
<b>FUSE</b>																	
F601	Δ 1-532-506-51	FUSE				R269	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
<b>METAL OXIDE</b>																	
			R284	1-216-295-91	SHORT												
			R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W									
			R400	1-247-863-91	CARBON	22K	5%	1/4W									
			R432	1-247-854-11	CARBON	9.1K	5%	1/4W									
			R502	Δ 1-215-923-00	METAL OXIDE	10K	5%	3W F									

**Note:**

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**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-21SE40C**

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK
R508 Δ	1-215-864-00	METAL OXIDE	150	5%	1W	F			
R533	1-215-461-00	METAL	47K	1%	1/4W				
R534	1-215-453-00	METAL	22K	1%	1/4W				
R561	1-216-349-00	METAL OXIDE	1	5%	1W	F			
R562	1-216-349-00	METAL OXIDE	1	5%	1W	F			
R574	1-249-417-11	CARBON	1K	5%	1/4	F			
R578	1-216-467-11	METAL OXIDE	56K	5%	2W	F			
☒ R582	1-208-826-11	RES,CHIP	68K	1%	1/10W				
R591	1-215-880-00	METAL OXIDE	10	5%	2W	F			
R601 Δ	1-247-289-00	CARBON	8.2M	5%	1W				
R603 Δ	1-202-962-11	CEMENTED	3.3	5%	10W				
R604	1-247-889-00	CARBON	270K	5%	1/4W				
R605	1-247-889-00	CARBON	270K	5%	1/4W				
R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W	F			
R612	1-216-357-00	METAL OXIDE	4.7	5%	1W	F			
R613	1-216-357-00	METAL OXIDE	4.7	5%	1W	F			
R618	1-212-942-00	FUSIBLE	2.2	5%	1/2W	F			
R623	1-249-437-11	CARBON	47K	5%	1/4W				
R627	1-249-441-11	CARBON	100K	5%	1/4W				
R628	1-249-425-11	CARBON	4.7K	5%	1/4W				
R629	1-247-807-31	CARBON	100	5%	1/4W				
R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W				
R691	1-249-399-11	CARBON	33	5%	1/4W				
R692	1-249-399-11	CARBON	33	5%	1/4W				
<b>RELAY</b>									
RY601 Δ 1-755-018-11 RELAY									
<b>SWITCH</b>									
S001	1-692-431-21	SWITCH, TACTILE							
S002	1-692-431-21	SWITCH, TACTILE							
S003	1-692-431-21	SWITCH, TACTILE							
S004	1-692-431-21	SWITCH, TACTILE							
S005	1-692-431-21	SWITCH, TACTILE							
S006	1-692-431-21	SWITCH, TACTILE							
S007	1-692-431-21	SWITCH, TACTILE							
<b>TRANSFORMER</b>									
T504 Δ 1-453-211-11 TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)									
T603 Δ 1-431-675-11 TRANSFORMER, CONVERTER (PIT)									

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-20V80**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-20V80</b>																	
<b>CAPACITOR</b>																	
C202	1-126-960-11	ELECT	1MF	20%	50V	C404	1-126-963-11	ELECT	4.7MF	20%	50V						
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	C405	1-126-963-11	ELECT	4.7MF	20%	50V						
C204	1-107-698-11	ELECT	10MF	20%	25V	C406	1-126-963-11	ELECT	4.7MF	20%	50V						
C205	1-126-960-11	ELECT	1MF	20%	50V	C407	1-126-9642-11	ELECT	10MF	20%	50V						
C206	1-126-960-11	ELECT	1MF	20%	50V	C410	1-126-963-11	ELECT	4.7MF	20%	50V						
C207	1-126-959-11	ELECT	0.47MF	20%	50V	C411	1-126-956-91	ELECT	0.1MF	20%	50V						
C208	1-126-959-11	ELECT	0.47MF	20%	50V	C412	1-130-495-00	FILM	0.1MF	5%	50V						
C209	1-126-963-11	ELECT	4.7MF	20%	50V	C413	1-126-967-11	ELECT	47MF	20%	50V						
C211	1-126-964-11	ELECT	10MF	20%	50V	C414	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V						
C212	1-126-963-11	ELECT	4.7MF	20%	50V	C415	1-126-956-91	ELECT	0.1MF	20%	50V						
C213	1-126-964-11	ELECT	10MF	20%	50V	C416	1-126-963-11	ELECT	4.7MF	20%	50V						
C214	1-126-957-11	ELECT	0.22MF	20%	50V	C418	1-126-963-11	ELECT	4.7MF	20%	50V						
C216	1-126-959-11	ELECT	0.47MF	20%	50V	C505 $\Delta$	1-162-115-00	CERAMIC	330PF	10%	2KV						
C220	1-126-941-11	ELECT	470MF	20%	25V	C507 $\Delta$	1-119-865-11	MYLAR	5700PF	3%	2KV						
C229	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C511 $\Delta$	1-117-665-11	FILM	0.33MF	5%	200V						
C233	1-126-960-11	ELECT	1MF	20%	50V	C591 $\Delta$	1-137-150-11	MYLAR	0.01MF	10%	100V						
C304	1-163-038-91	CERAMIC CHIP	0.1MF		25V	C601 $\Delta$	1-136-311-51	FILM	0.47MF	20%	125V						
C307	1-126-964-11	ELECT	10MF	20%	50V	C607 $\Delta$	1-117-941-11	ELECT(BLOCK)	470MF	20%	250V						
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C614 $\Delta$	1-129-723-00	FILM	0.056MF	5%	630V						
C312	1-126-942-61	ELECT	1000MF	20%	25V	C625	1-126-960-11	ELECT	1MF	20%	50V						
<b>CONNECTOR</b>																	
C320	1-126-959-11	ELECT	0.47MF	20%	50V	C699	1-164-645-11	CERAMIC	1000PF	10%	500V						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	<b>DIODE</b>											
C348	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	D002	1-810-039-21	LED UNIT									
C350	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	D202	8-719-110-17	DIODE MTZJ-T-77-10B									
C351	1-126-964-11	ELECT	10MF	20%	50V	D203	8-719-110-17	DIODE MTZJ-T-77-10B									
C352	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	D204	8-719-110-17	DIODE MTZJ-T-77-10B									
C353	1-163-038-91	CERAMIC CHIP	0.1MF		25V	D206	8-719-110-17	DIODE MTZJ-T-77-10B									
C354	1-163-038-91	CERAMIC CHIP	0.1MF		25V	D207	8-719-109-66	DIODE RD3.3ES-T1B									
C355	1-164-222-11	CERAMIC CHIP	0.22MF		25V	D209	8-719-110-17	DIODE MTZJ-T-77-10B									
C356	1-163-038-91	CERAMIC CHIP	0.1MF		25V	D280	8-719-110-17	DIODE MTZJ-T-77-10B									
C357	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	D619	8-719-991-33	DIODE 1SS133T-77									
C358	1-104-664-11	ELECT	47MF	20%	25V	<b>FUSE</b>											
C359	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<b>IC</b>											
C360	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	IC200	8-759-450-93	IC NJM2521M-TE1									
C361	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V	IC202	8-759-100-96	IC NJM4558M-TE2									
C362	1-126-964-11	ELECT	10MF	20%	50V	IC301	8-752-083-09	IC CXA2061S									



## BOARD VARIANT PARTS LIST

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**Note:**

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The parts on this page belong to the following model(s) only:

**KV-20V80**

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
IC302	8-752-385-80	IC CXD2073S		R206	1-247-895-91	CARBON	470K 5% 1/4W
IC401	8-759-490-17	IC TDA7057AQ/N2		R214	1-216-113-00	RES,CHIP	470K 5% 1/10W
IC402	8-752-072-39	IC CXA2021S		R215	1-216-033-00	RES,CHIP	220 5% 1/10W
<b>JACK</b>				R216	1-216-113-00	RES,CHIP	470K 5% 1/10W
J200	1-580-441-61	JACK, PIN 2P		R217	1-216-033-00	RES,CHIP	220 5% 1/10W
J201	1-580-443-21	JACK, PIN 3P		R218	1-216-067-00	RES,CHIP	5.6K 5% 1/10W
J202	1-691-110-11	JACK, PIN 3P		R219	1-216-073-00	RES,CHIP	10K 5% 1/10W
J203	1-694-242-11	TERMINAL, S		R220	1-216-073-00	RES,CHIP	10K 5% 1/10W
<b>COIL</b>				R221	1-216-073-00	RES,CHIP	10K 5% 1/10W
L352	1-412-031-11	INDUCTOR CHIP 47UH		R222	1-216-067-00	RES,CHIP	5.6K 5% 1/10W
<b>IC LINK</b>				R223	1-249-429-11	CARBON	10K 5% 1/4W
PS201	1-532-984-11	LINK, IC		R224	1-249-429-11	CARBON	10K 5% 1/4W
<b>TRANSISTOR</b>				R225	1-216-073-00	RES,CHIP	10K 5% 1/10W
Q200	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R226	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
Q201	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R227	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q350	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R228	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
Q351	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R229	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q352	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R232	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
Q353	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R233	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
Q354	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R234	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q355	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R235	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q356	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R237	1-247-815-91	CARBON	220 5% 1/4W
Q357	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R238	1-249-417-11	CARBON	1K 5% 1/4W
Q358	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R241	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
Q359	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R268	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q380	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX		R269	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA		R283	1-216-022-00	RES,CHIP	75 5% 1/10W
<b>RESISTOR</b>				R287	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R010	1-216-033-00	RES,CHIP	220 5% 1/10W	R303	1-216-025-91	RES,CHIP	100 5% 1/10W
R011	1-247-815-91	CARBON	220 5% 1/4W	R307	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R051	1-216-033-00	RES,CHIP	220 5% 1/10W	R350	1-208-766-11	RES,CHIP	220 1% 1/10W
R053	1-247-815-91	CARBON	220 5% 1/4W	R351	1-208-766-11	RES,CHIP	220 1% 1/10W
R070	1-249-425-11	CARBON	4.7K 5% 1/4W	R352	1-208-794-11	RES,CHIP	3.3K 1% 1/10W
R071	1-249-425-11	CARBON	4.7K 5% 1/4W	R354	1-208-794-11	RES,CHIP	3.3K 1% 1/10W
R072	1-247-815-91	CARBON	220 5% 1/4W	R357	1-216-091-00	RES,CHIP	56K 5% 1/10W
R080	1-249-429-11	CARBON	10K 5% 1/4W	R358	1-216-043-91	RES,CHIP	560 5% 1/10W
R086	1-216-073-00	RES,CHIP	10K 5% 1/10W	R359	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R202	1-216-113-00	RES,CHIP	470K 5% 1/10W	R360	1-216-081-00	RES,CHIP	22K 5% 1/10W
R204	1-216-022-00	RES,CHIP	75 5% 1/10W	R361	1-216-049-91	RES,CHIP	1K 5% 1/10W
R205	1-247-895-91	CARBON	470K 5% 1/4W	R362	1-216-043-91	RES,CHIP	560 5% 1/10W
				R363	1-216-037-00	RES,CHIP	330 5% 1/10W
				R364	1-216-025-91	RES,CHIP	100 5% 1/10W
				R365	1-216-025-91	RES,CHIP	100 5% 1/10W
				R366	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
				R367	1-216-057-00	RES,CHIP	2.2K 5% 1/10W

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## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-20V80**

**Note:**

The components identified with shading and a critical symbol (  $\Delta$  ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
R368	1-216-025-91	RES,CHIP	100	5%	1/10W	R691	1-247-791-91	CARBON	22	5%	1/4W
R369	1-216-045-00	RES,CHIP	680	5%	1/10W	R692	1-247-791-91	CARBON	22	5%	1/4W
R370	1-216-295-91	SHORT									
R372	1-216-035-00	RES,CHIP	270	5%	1/10W			<u>RELAY</u>			
R373	1-216-025-91	RES,CHIP	100	5%	1/10W			RY601 $\Delta$ 1-755-018-11 RELAY			
R374	1-216-025-91	RES,CHIP	100	5%	1/10W						
R375	1-216-053-00	RES,CHIP	1.5K	5%	1/10W			<u>SWITCH</u>			
R376	1-216-049-91	RES,CHIP	1K	5%	1/10W	S001	1-692-431-21	SWITCH, TACTILE			
R377	1-216-049-91	RES,CHIP	1K	5%	1/10W	S002	1-692-431-21	SWITCH, TACTILE			
R378	1-216-041-00	RES,CHIP	470	5%	1/10W	S003	1-692-431-21	SWITCH, TACTILE			
R379	1-216-049-91	RES,CHIP	1K	5%	1/10W	S004	1-692-431-21	SWITCH, TACTILE			
R380	1-208-790-11	RES,CHIP	2.2K	1%	1/10W	S005	1-692-431-21	SWITCH, TACTILE			
R382	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	S006	1-692-431-21	SWITCH, TACTILE			
R387	1-216-025-91	RES,CHIP	100	5%	1/10W	S007	1-692-431-21	SWITCH, TACTILE			
R388	1-216-025-91	RES,CHIP	100	5%	1/10W						
R395	1-216-025-91	RES,CHIP	100	5%	1/10W			<u>TRANSFORMER</u>			
R396	1-216-025-91	RES,CHIP	100	5%	1/10W	T504 $\Delta$ 1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)				
R397	1-216-025-91	RES,CHIP	100	5%	1/10W	T603 $\Delta$ 1-431-674-11	TRANSFORMER, CONVERTER (PIT)				
R400	1-247-863-91	CARBON	22K	5%	1/4W						
R402	1-216-121-91	RES,CHIP	1M	5%	1/10W			<u>THERMISTOR, POSITIVE</u>			
R403	1-247-815-91	CARBON	220	5%	1/4W	THP601	1-810-597-11	THERMISTOR, POSITIVE			
R404	1-247-815-91	CARBON	220	5%	1/4W						
R432	1-249-429-11	CARBON	10K	5%	1/4W			<u>TUNER</u>			
R502 $\Delta$	1-215-923-00	METAL OXIDE	10K	5%	3W F			TU101 $\Delta$ 8-598-431-00 TUNER, FSS BTF-WA411			
R508 $\Delta$	1-215-864-00	METAL OXIDE	150	5%	1W F						
R533	1-215-461-00	METAL	47K	1%	1/4W			<u>VARISTOR</u>			
R534	1-215-453-00	METAL	22K	1%	1/4W	VDR601 $\Delta$ 1-801-074-41	VARISTOR ERZV10D271				
R561	1-216-349-00	METAL OXIDE	1	5%	1W F	VDR602	1-801-074-41	VARISTOR ERZV10D271			
R562	1-216-349-00	METAL OXIDE	1	5%	1W F						
R574	1-249-417-11	CARBON	1K	5%	1/4W F						
R578	1-216-467-11	METAL OXIDE	56K	5%	2W F						
R582	1-208-826-11	RES,CHIP	68K	1%	1/10W						
R591	1-215-880-00	METAL OXIDE	10	5%	2W F						
R600 $\Delta$	1-219-513-11	CARBON	4.7M	5%	1/2W						
R603 $\Delta$	1-205-998-11	CEMENTED	1	5%	10W						
R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F						
R612	1-216-349-00	METAL OXIDE	1	5%	1W F						
R613	1-216-349-00	METAL OXIDE	1	5%	1W F						
R615	1-247-893-11	CARBON	390K	5%	1/4W						
R618	1-212-857-00	FUSIBLE	10	5%	1/4W F						
R623	1-249-441-11	CARBON	100K	5%	1/4W						
R627	1-249-441-11	CARBON	100K	5%	1/4W						
R628	1-249-425-11	CARBON	4.7K	5%	1/4W						
R629	1-247-807-31	CARBON	100	5%	1/4W						
R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W						



## Note:

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

## Note:

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

KV-21SE80

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK															
<b>A BOARD VARIANT LIST: KV-21SE80</b>																								
<b>CAPACITOR</b>																								
C202	1-126-960-11	ELECT	1MF	20%	50V	C406	1-126-963-11	ELECT	4.7MF	20%	50V													
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	C407	1-126-964-11	ELECT	10MF	20%	50V													
C204	1-107-698-11	ELECT	10MF	20%	25V	C410	1-126-963-11	ELECT	4.7MF	20%	50V													
C205	1-126-960-11	ELECT	1MF	20%	50V	C411	1-126-956-91	ELECT	0.1MF	20%	50V													
C206	1-126-960-11	ELECT	1MF	20%	50V	C412	1-130-495-00	FILM	0.1MF	5%	50V													
C207	1-126-959-11	ELECT	0.47MF	20%	50V	C413	1-126-967-11	ELECT	47MF	20%	50V													
C208	1-126-959-11	ELECT	0.47MF	20%	50V	C414	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V													
C209	1-126-963-11	ELECT	4.7MF	20%	50V	C415	1-126-956-91	ELECT	0.1MF	20%	50V													
C211	1-126-964-11	ELECT	10MF	20%	50V	C416	1-126-963-11	ELECT	4.7MF	20%	50V													
C212	1-126-963-11	ELECT	4.7MF	20%	50V	C418	1-126-963-11	ELECT	4.7MF	20%	50V													
C213	1-126-964-11	ELECT	10MF	20%	50V	C505 $\Delta$	1-162-115-00	CERAMIC	330PF	10%	2KV													
C214	1-126-957-11	ELECT	0.22MF	20%	50V	C507 $\Delta$	1-119-865-11	MYLAR	5700PF	3%	2KV													
C216	1-126-959-11	ELECT	0.47MF	20%	50V	C511 $\Delta$	1-117-665-11	FILM	0.33MF	5%	200V													
C220	1-126-941-11	ELECT	470MF	20%	25V	C591 $\Delta$	1-137-150-11	MYLAR	0.01MF	10%	100V													
C229	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C601 $\Delta$	1-136-311-51	FILM	0.47MF	20%	125V													
C233	1-126-960-11	ELECT	1MF	20%	50V	C607 $\Delta$	1-117-941-11	ELECT(BLOCK)	470MF	20%	250V													
C304	1-163-038-91	CERAMIC CHIP	0.1MF		25V	C614 $\Delta$	1-129-723-00	FILM	0.056MF	5%	630V													
C307	1-126-964-11	ELECT	10MF	20%	50V	C625	1-126-960-11	ELECT	1MF	20%	50V													
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C699	1-164-645-11	CERAMIC	1000PF	10%	500V													
C312	1-126-942-61	ELECT	1000MF	20%	25V	<b>CONNECTOR</b>																		
C320	1-126-959-11	ELECT	0.47MF	20%	50V	CN401	1-564-505-11	PLUG, CONNECTOR 2P	<b>DIODE</b>			<b>DIODE</b>												
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	D002	1-810-039-21	LED UNIT	<b>FUSE</b>			<b>FUSE</b>												
C348	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	D202	8-719-110-17	DIODE MTZJ-T-77-10B	F601 $\Delta$	1-533-795-11	LINK, FUSE	<b>IC</b>												
C350	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	D203	8-719-110-17	DIODE MTZJ-T-77-10B	IC200	8-759-450-93	IC NJM2521M-TE1	<b>IC</b>												
C351	1-126-964-11	ELECT	10MF	20%	50V	D204	8-719-110-17	DIODE MTZJ-T-77-10B	IC202	8-759-100-96	IC NJM4558M-TE2	<b>IC</b>												
C352	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	D206	8-719-110-17	DIODE MTZJ-T-77-10B	IC203	8-752-083-09	IC CXA2061S	<b>IC</b>												
C353	1-163-038-91	CERAMIC CHIP	0.1MF		25V	D207	8-719-109-66	DIODE RD3.3ES-T1B	IC204	8-752-385-80	IC CXD2073S	<b>IC</b>												
C354	1-163-038-91	CERAMIC CHIP	0.1MF		25V	D209	8-719-110-17	DIODE MTZJ-T-77-10B	IC205	8-759-490-17	IC TDA7057AQ/N2	<b>IC</b>												
C355	1-164-222-11	CERAMIC CHIP	0.22MF		25V	D280	8-719-110-17	DIODE MTZJ-T-77-10B	IC206	8-752-991-33	DIODE 1SS133T-77	<b>IC</b>												
C356	1-163-038-91	CERAMIC CHIP	0.1MF		25V	D619	8-719-991-33	DIODE 1SS133T-77	<b>IC</b>			<b>IC</b>												
C357	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<b>FUSE</b>													<b>IC</b>					
C358	1-104-664-11	ELECT	47MF	20%	25V	<b>FUSE</b>													<b>IC</b>					
C359	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<b>IC</b>													<b>IC</b>					
C360	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<b>IC</b>													<b>IC</b>					
C361	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V	<b>IC</b>													<b>IC</b>					
C362	1-126-964-11	ELECT	10MF	20%	50V	IC200	8-759-450-93	IC NJM2521M-TE1	<b>IC</b>															
C400	1-126-963-11	ELECT	4.7MF	20%	50V	IC202	8-759-100-96	IC NJM4558M-TE2	<b>IC</b>															
C401	1-126-956-91	ELECT	0.1MF	20%	50V	IC301	8-752-083-09	IC CXA2061S	<b>IC</b>															
C402	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	IC302	8-752-385-80	IC CXD2073S	<b>IC</b>															
C403	1-126-963-11	ELECT	4.7MF	20%	50V	IC401	8-759-490-17	IC TDA7057AQ/N2	<b>IC</b>															
C404	1-126-963-11	ELECT	4.7MF	20%	50V	IC402	8-752-072-39	IC CXA2021S	<b>IC</b>															
C405	1-126-963-11	ELECT	4.7MF	20%	50V				<b>IC</b>															

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21SE80**

**Note:**

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**Note:**

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REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
		<u>JACK</u>				R215	1-216-033-00	RES,CHIP	220	5%	1/10W
J200	1-580-441-61	JACK, PIN 2P				R216	1-216-113-00	RES,CHIP	470K	5%	1/10W
J201	1-580-443-21	JACK, PIN 3P				R217	1-216-033-00	RES,CHIP	220	5%	1/10W
J202	1-691-110-11	JACK, PIN 3P				R218	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
		<u>COIL</u>				R219	1-216-073-00	RES,CHIP	10K	5%	1/10W
L352	1-412-031-11	INDUCTOR CHIP 47UH				R220	1-216-073-00	RES,CHIP	10K	5%	1/10W
		<u>IC LINK</u>				R221	1-216-073-00	RES,CHIP	10K	5%	1/10W
PS201	1-532-984-11	LINK, IC				R222	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
		<u>TRANSISTOR</u>				R223	1-249-429-11	CARBON	10K	5%	1/4W
Q200	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R224	1-249-429-11	CARBON	10K	5%	1/4W
Q201	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R225	1-216-073-00	RES,CHIP	10K	5%	1/10W
Q206	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R226	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
Q207	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R227	1-216-097-91	RES,CHIP	100K	5%	1/10W
Q350	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX				R228	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
Q351	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R229	1-216-097-91	RES,CHIP	100K	5%	1/10W
Q352	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX				R232	1-216-073-00	RES,CHIP	10K	5%	1/10W
Q353	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX				R233	1-216-073-00	RES,CHIP	10K	5%	1/10W
Q354	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX				R234	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
Q355	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R235	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
Q356	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX				R237	1-247-815-91	CARBON	220	5%	1/4W
Q357	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX				R238	1-249-417-11	CARBON	1K	5%	1/4W
Q358	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				R241	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
Q359	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX				R247	1-216-025-91	RES,CHIP	100	5%	1/10W
Q380	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX				R248	1-216-025-91	RES,CHIP	100	5%	1/10W
Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA				R249	1-216-081-00	RES,CHIP	22K	5%	1/10W
		<u>RESISTOR</u>				R250	1-216-081-00	RES,CHIP	22K	5%	1/10W
R010	1-216-033-00	RES,CHIP	220	5%	1/10W	R268	1-216-081-00	RES,CHIP	22K	5%	1/10W
R011	1-247-815-91	CARBON	220	5%	1/4W	R269	1-216-081-00	RES,CHIP	22K	5%	1/10W
R051	1-216-033-00	RES,CHIP	220	5%	1/10W	R283	1-216-022-00	RES,CHIP	75	5%	1/10W
R053	1-247-815-91	CARBON	220	5%	1/4W	R284	1-216-295-91	SHORT			
R070	1-249-425-11	CARBON	4.7K	5%	1/4W	R287	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R071	1-249-425-11	CARBON	4.7K	5%	1/4W	R303	1-216-025-91	RES,CHIP	100	5%	1/10W
R072	1-247-815-91	CARBON	220	5%	1/4W	R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R080	1-249-429-11	CARBON	10K	5%	1/4W	R350	1-208-766-11	RES,CHIP	220	1%	1/10W
R086	1-216-073-00	RES,CHIP	10K	5%	1/10W	R351	1-208-766-11	RES,CHIP	220	1%	1/10W
R202	1-216-113-00	RES,CHIP	470K	5%	1/10W	R352	1-208-794-11	RES,CHIP	3.3K	1%	1/10W
R204	1-216-022-00	RES,CHIP	75	5%	1/10W	R354	1-208-794-11	RES,CHIP	3.3K	1%	1/10W
R205	1-247-895-91	CARBON	470K	5%	1/4W	R357	1-216-091-00	RES,CHIP	56K	5%	1/10W
R206	1-247-895-91	CARBON	470K	5%	1/4W	R358	1-216-043-91	RES,CHIP	560	5%	1/10W
R214	1-216-113-00	RES,CHIP	470K	5%	1/10W	R359	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
						R360	1-216-081-00	RES,CHIP	22K	5%	1/10W
						R361	1-216-049-91	RES,CHIP	1K	5%	1/10W
						R362	1-216-043-91	RES,CHIP	560	5%	1/10W
						R363	1-216-037-00	RES,CHIP	330	5%	1/10W
						R364	1-216-025-91	RES,CHIP	100	5%	1/10W



## Note:

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## Note:

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The parts on this page belong to the following model(s) only:

KV-21SE80

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
R365	1-216-025-91	RES,CHIP	100	5%	1/10W	R628	1-249-425-11	CARBON	4.7K	5%	1/4W						
R366	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	R629	1-247-807-31	CARBON	100	5%	1/4W						
R367	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W						
R368	1-216-025-91	RES,CHIP	100	5%	1/10W	R691	1-247-791-91	CARBON	22	5%	1/4W						
R369	1-216-045-00	RES,CHIP	680	5%	1/10W	R692	1-247-791-91	CARBON	22	5%	1/4W						
<b>RELAY</b>																	
RY601 Δ 1-755-018-11 RELAY																	
<b>SWITCH</b>																	
S001	1-692-431-21	SWITCH, TACTILE				S002	1-692-431-21	SWITCH, TACTILE									
S003	1-692-431-21	SWITCH, TACTILE				S004	1-692-431-21	SWITCH, TACTILE									
S005	1-692-431-21	SWITCH, TACTILE				S006	1-692-431-21	SWITCH, TACTILE									
S007	1-692-431-21	SWITCH, TACTILE				<b>TRANSFORMER</b>											
T504	Δ 1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)				T603	Δ 1-431-674-11	TRANSFORMER, CONVERTER (PIT)									
<b>THERMISTOR</b>																	
THP601	1-810-597-11	THERMISTOR, POSITIVE				<b>TUNER</b>											
TU101 Δ 8-598-431-00 TUNER, FSS BTF-WA411																	
<b>VARISTOR</b>																	
VDR601	Δ 1-801-074-41	VARISTOR ERZV10D271				VDR602	1-801-074-41	VARISTOR ERZV10D271									
R432	1-249-429-11	CARBON	10K	5%	1/4W												
R502	Δ 1-215-923-00	METAL OXIDE	10K	5%	3W F												
R508	Δ 1-215-864-00	METAL OXIDE	150	5%	1W F												
R533	1-215-461-00	METAL	47K	1%	1/4W												
R534	1-215-453-00	METAL	22K	1%	1/4W												
R561	1-216-349-00	METAL OXIDE	1	5%	1W F												
R562	1-216-349-00	METAL OXIDE	1	5%	1W F												
R574	1-249-417-11	CARBON	1K	5%	1/4 F												
R578	1-216-467-11	METAL OXIDE	56K	5%	2W F												
■ R582	1-208-826-11	RES,CHIP	68K	1%	1/10W												
R591	1-215-880-00	METAL OXIDE	10	5%	2W F												
R600	Δ 1-219-513-11	CARBON	4.7M	5%	1/2W												
R603	Δ 1-205-998-11	CEMENTED	1	5%	10W												
R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F												
R612	1-216-349-00	METAL OXIDE	1	5%	1W F												
R613	1-216-349-00	METAL OXIDE	1	5%	1W F												
R615	1-247-893-11	CARBON	390K	5%	1/4W												
R618	1-212-857-00	FUSIBLE	10	5%	1/4W F												
R623	1-249-441-11	CARBON	100K	5%	1/4W												
R627	1-249-441-11	CARBON	100K	5%	1/4W												

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21SE80A**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK											
<b>A BOARD VARIANT LIST: KV-21SE80A</b>																				
<b>CAPACITOR</b>																				
C202	1-126-960-11	ELECT	1MF	20%	50V	C607 $\Delta$	1-125-731-11	ELECT(BLOCK)	270MF	20%	400V									
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	C614 $\Delta$	1-137-347-11	FILM	0.022MF	3%	2KV									
C204	1-107-698-11	ELECT	10MF	20%	25V	C625	1-126-960-11	ELECT	1MF	20%	50V									
C205	1-126-960-11	ELECT	1MF	20%	50V	<b>CONNECTOR</b>														
C206	1-126-960-11	ELECT	1MF	20%	50V	CN401	1-564-505-11	PLUG, CONNECTOR 2P												
C207	1-126-959-11	ELECT	0.47MF	20%	50V	<b>DIODE</b>														
C208	1-126-959-11	ELECT	0.47MF	20%	50V	D002	1-810-039-11	LED UNIT												
C209	1-126-963-11	ELECT	4.7MF	20%	50V	D202	8-719-110-17	DIODE MTZJ-T-77-10B												
C211	1-126-964-11	ELECT	10MF	20%	50V	D203	8-719-110-17	DIODE MTZJ-T-77-10B												
C212	1-126-963-11	ELECT	4.7MF	20%	50V	D204	8-719-110-17	DIODE MTZJ-T-77-10B												
C213	1-126-964-11	ELECT	10MF	20%	50V	D207	8-719-109-66	DIODE RD3.3ES-T1B												
C214	1-126-957-11	ELECT	0.22MF	20%	50V	D209	8-719-110-17	DIODE MTZJ-T-77-10B												
C216	1-126-959-11	ELECT	0.47MF	20%	50V	D619	8-719-991-33	DIODE 1SS133T-77												
C220	1-126-941-11	ELECT	470MF	20%	25V	<b>FUSE</b>														
C233	1-126-960-11	ELECT	1MF	20%	50V	F601 $\Delta$	1-532-506-51	FUSE												
C300	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	<b>IC</b>														
C302	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	IC200	8-759-450-93	IC NJM2521M-TE1												
C309	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	IC202	8-759-100-96	IC NJM4558M-TE2												
C312	1-126-942-61	ELECT	1000MF	20%	25V	IC301	8-752-082-35	IC CXA2060AS												
C320	1-126-957-11	ELECT	0.22MF	20%	50V	IC401	8-759-490-17	IC TDA7057AQ/N2												
C321	1-163-259-91	CERAMIC CHIP	220PF	5%	50V	IC402	8-752-072-39	IC CXA2021S												
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				<b>JACK</b>														
C400	1-126-963-11	ELECT	4.7MF	20%	50V	J200	1-580-441-61	JACK, PIN 2P												
C401	1-126-956-91	ELECT	0.1MF	20%	50V	J201	1-580-443-21	JACK, PIN 3P												
C402	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	J202	1-691-110-11	JACK, PIN 3P												
C403	1-126-963-11	ELECT	4.7MF	20%	50V	<b>IC LINK</b>														
C404	1-126-963-11	ELECT	4.7MF	20%	50V	PS201	1-532-984-11	LINK, IC												
C405	1-126-963-11	ELECT	4.7MF	20%	50V	<b>TRANSISTOR</b>														
C406	1-126-963-11	ELECT	4.7MF	20%	50V	Q200	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX												
C407	1-126-964-11	ELECT	10MF	20%	50V	Q201	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX												
C410	1-126-963-11	ELECT	4.7MF	20%	50V	Q206	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX												
C411	1-126-956-91	ELECT	0.1MF	20%	50V	Q207	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX												
C412	1-130-495-00	FILM	0.1MF	5%	50V	Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA												
C413	1-126-967-11	ELECT	47MF	20%	50V	<b>RESISTOR</b>														
C414	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	R010	1-216-033-00	RES,CHIP	220	5%	1/10W									
C415	1-126-956-91	ELECT	0.1MF	20%	50V	R011	1-247-815-91	CARBON	220	5%	1/4W									
C416	1-126-963-11	ELECT	4.7MF	20%	50V	R051	1-216-033-00	RES,CHIP	220	5%	1/10W									
C418	1-126-963-11	ELECT	4.7MF	20%	50V															
C505 $\Delta$	1-162-115-00	CERAMIC	330PF	10%	2KV															
C507 $\Delta$	1-119-865-11	MYLAR	5700PF	3%	2KV															
C511 $\Delta$	1-117-665-11	FILM	0.33MF	5%	200V															
C591	1-137-150-11	MYLAR	0.01MF	10%	100V															
C601 $\Delta$	1-136-311-61	FILM	0.47MF	20%	300V															



## BOARD VARIANT PARTS LIST

## Note:

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

## Note:

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

KV-21SE80A

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
R070	1-249-425-11	CARBON	4.7K	5%	1/4W	R404	1-247-815-91	CARBON	220	5%	1/4W
R071	1-249-425-11	CARBON	4.7K	5%	1/4W	R432	1-249-429-11	CARBON	10K	5%	1/4W
R072	1-247-815-91	CARBON	220	5%	1/4W	R502	△ 1-215-923-00	METAL OXIDE	10K	5%	3W F
R081	1-249-413-11	CARBON	470	5%	1/4W	R508	△ 1-215-864-00	METAL OXIDE	150	5%	1W F
R086	1-216-073-00	RES,CHIP	10K	5%	1/10W	R533	1-215-461-00	METAL	47K	1%	1/4W
R202	1-216-113-00	RES,CHIP	470K	5%	1/10W	R534	1-215-453-00	METAL	22K	1%	1/4W
R204	1-216-022-00	RES,CHIP	75	5%	1/10W	R561	1-216-349-00	METAL OXIDE	1	5%	1W F
R205	1-247-895-91	CARBON	470K	5%	1/4W	R562	1-216-349-00	METAL OXIDE	1	5%	1W F
R206	1-247-895-91	CARBON	470K	5%	1/4W	R574	1-249-417-11	CARBON	1K	5%	1/4W F
R214	1-216-113-00	RES,CHIP	470K	5%	1/10W	R578	1-216-467-11	METAL OXIDE	56K	5%	2W F
R215	1-216-033-00	RES,CHIP	220	5%	1/10W	■ R582	1-208-826-11	RES,CHIP	68K	1%	1/10W
R216	1-216-113-00	RES,CHIP	470K	5%	1/10W	R591	1-215-880-00	METAL OXIDE	10	5%	2W F
R217	1-216-033-00	RES,CHIP	220	5%	1/10W	R601	△ 1-247-289-00	CARBON	8.2M	5%	1W
R218	1-216-067-00	RES,CHIP	5.6K	5%	1/10W	R603	△ 1-202-962-11	CEMENTED	3.3	5%	10W
R219	1-216-073-00	RES,CHIP	10K	5%	1/10W	R604	1-247-889-00	CARBON	270K	5%	1/4W
R220	1-216-073-00	RES,CHIP	10K	5%	1/10W	R605	1-247-889-00	CARBON	270K	5%	1/4W
R221	1-216-073-00	RES,CHIP	10K	5%	1/10W	R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F
R222	1-216-067-00	RES,CHIP	5.6K	5%	1/10W	R612	1-216-357-00	METAL OXIDE	4.7	5%	1W F
R223	1-249-429-11	CARBON	10K	5%	1/4W	R613	1-216-357-00	METAL OXIDE	4.7	5%	1W F
R224	1-249-429-11	CARBON	10K	5%	1/4W	R618	1-212-942-00	FUSIBLE	2.2	5%	1/2W F
R225	1-216-073-00	RES,CHIP	10K	5%	1/10W	R623	1-249-437-11	CARBON	47K	5%	1/4W
R226	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R627	1-249-441-11	CARBON	100K	5%	1/4W
R227	1-216-097-91	RES,CHIP	100K	5%	1/10W	R628	1-249-425-11	CARBON	4.7K	5%	1/4W
R228	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R629	1-247-807-31	CARBON	100	5%	1/4W
R229	1-216-097-91	RES,CHIP	100K	5%	1/10W	R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W
R232	1-216-073-00	RES,CHIP	10K	5%	1/10W	R691	1-249-399-11	CARBON	33	5%	1/4W
R233	1-216-073-00	RES,CHIP	10K	5%	1/10W	R692	1-249-399-11	CARBON	33	5%	1/4W
R234	1-216-055-00	RES,CHIP	1.8K	5%	1/10W	<u>RELAY</u>					
R235	1-216-055-00	RES,CHIP	1.8K	5%	1/10W	RY601 △ 1-755-018-11 RELAY					
R237	1-247-815-91	CARBON	220	5%	1/4W	<u>SWITCH</u>					
R238	1-249-417-11	CARBON	1K	5%	1/4W	S001	1-692-431-21	SWITCH, TACTILE			
R241	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	S002	1-692-431-21	SWITCH, TACTILE			
R247	1-216-025-91	RES,CHIP	100	5%	1/10W	S003	1-692-431-21	SWITCH, TACTILE			
R248	1-216-025-91	RES,CHIP	100	5%	1/10W	S004	1-692-431-21	SWITCH, TACTILE			
R249	1-216-081-00	RES,CHIP	22K	5%	1/10W	S005	1-692-431-21	SWITCH, TACTILE			
R250	1-216-081-00	RES,CHIP	22K	5%	1/10W	S006	1-692-431-21	SWITCH, TACTILE			
R268	1-216-081-00	RES,CHIP	22K	5%	1/10W	S007	1-692-431-21	SWITCH, TACTILE			
R269	1-216-081-00	RES,CHIP	22K	5%	1/10W	<u>TRANSFORMER</u>					
R284	1-216-295-91	SHORT				T504	△ 1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)			
R300	1-216-295-91	SHORT				T603	△ 1-431-675-11	TRANSFORMER, CONVERTER (PIT)			
R302	1-216-295-91	SHORT									
R307	1-216-077-00	RES,CHIP	15K	5%	1/10W						
R400	1-247-863-91	CARBON	22K	5%	1/4W						
R402	1-216-121-91	RES,CHIP	1M	5%	1/10W						
R403	1-247-815-91	CARBON	220	5%	1/4W						

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21SE80A**

**Note:**

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**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<b><u>THERMISTOR</u></b>							
THP601	1-809-827-11	THERMISTOR, POSITIVE					
<b><u>TUNER</u></b>							
TU101	$\Delta$ 8-598-431-00	TUNER, FSS BTF-WA411					
<b><u>VARISTOR</u></b>							
VDR601	$\Delta$ 1-809-267-41	VARISTOR ERZV10D471					
VDR602	1-809-267-41	VARISTOR ERZV10D471					
<b><u>CRYSTAL</u></b>							
X300	1-579-972-11	VIBRATOR, CRYSTAL					
X302	1-579-973-11	VIBRATOR, CRYSTAL					



## Note:

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## Note:

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

KV-21SE80C

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK																	
<b>A BOARD VARIANT LIST: KV-21SE80C</b>																										
<b>CAPACITOR</b>																										
C202	1-126-960-11	ELECT	1MF	20%	50V	C406	1-126-963-11	ELECT	4.7MF	20%	50V															
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	C407	1-126-964-11	ELECT	10MF	20%	50V															
C204	1-107-698-11	ELECT	10MF	20%	25V	C410	1-126-963-11	ELECT	4.7MF	20%	50V															
C205	1-126-960-11	ELECT	1MF	20%	50V	C411	1-126-956-91	ELECT	0.1MF	20%	50V															
C206	1-126-960-11	ELECT	1MF	20%	50V	C412	1-130-495-00	FILM	0.1MF	5%	50V															
C207	1-126-959-11	ELECT	0.47MF	20%	50V	C413	1-126-967-11	ELECT	47MF	20%	50V															
C208	1-126-959-11	ELECT	0.47MF	20%	50V	C414	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V															
C209	1-126-963-11	ELECT	4.7MF	20%	50V	C415	1-126-956-91	ELECT	0.1MF	20%	50V															
C211	1-126-964-11	ELECT	10MF	20%	50V	C416	1-126-963-11	ELECT	4.7MF	20%	50V															
C212	1-126-963-11	ELECT	4.7MF	20%	50V	C418	1-126-963-11	ELECT	4.7MF	20%	50V															
C213	1-126-964-11	ELECT	10MF	20%	50V	C505	△ 1-162-115-00	CERAMIC	330PF	10%	2KV															
C214	1-126-957-11	ELECT	0.22MF	20%	50V	C507	△ 1-119-865-11	MYLAR	5700PF	3%	2KV															
C216	1-126-959-11	ELECT	0.47MF	20%	50V	C511	△ 1-117-665-11	FILM	0.33MF	5%	200V															
C220	1-126-941-11	ELECT	470MF	20%	25V	C591	△ 1-137-150-11	MYLAR	0.01MF	10%	100V															
C229	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C601	△ 1-136-311-61	FILM	0.47MF	20%	300V															
C233	1-126-960-11	ELECT	1MF	20%	50V	C607	△ 1-125-731-11	ELECT(BLOCK)	270MF	20%	400V															
C304	1-163-038-91	CERAMIC CHIP	0.1MF		25V	C614	△ 1-137-347-11	FILM	0.022MF	3%	2KV															
C307	1-126-964-11	ELECT	10MF	20%	50V	C625	1-126-960-11	ELECT	1MF	20%	50V															
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<b>CONNECTOR</b>																				
C312	1-126-942-61	ELECT	1000MF	20%	25V	CN401	1-564-505-11	PLUG, CONNECTOR 2P																		
C320	1-126-959-11	ELECT	0.47MF	20%	50V	<b>DIODE</b>																				
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	D002	1-810-039-21	LED UNIT																		
C348	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	D202	8-719-110-17	DIODE MTZJ-T-77-10B																		
C350	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	D203	8-719-110-17	DIODE MTZJ-T-77-10B																		
C351	1-126-964-11	ELECT	10MF	20%	50V	D204	8-719-110-17	DIODE MTZJ-T-77-10B																		
C352	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	D206	8-719-110-17	DIODE MTZJ-T-77-10B																		
C353	1-163-038-91	CERAMIC CHIP	0.1MF		25V	D207	8-719-109-66	DIODE RD3.3ES-T1B																		
C354	1-163-038-91	CERAMIC CHIP	0.1MF		25V	D209	8-719-110-17	DIODE MTZJ-T-77-10B																		
C355	1-164-222-11	CERAMIC CHIP	0.22MF		25V	D280	8-719-110-17	DIODE MTZJ-T-77-10B																		
C356	1-163-038-91	CERAMIC CHIP	0.1MF		25V	D619	8-719-991-33	DIODE 1SS133T-77																		
C357	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<b>FUSE</b>																				
C358	1-104-664-11	ELECT	47MF	20%	25V	F601	△ 1-532-506-51	FUSE																		
C359	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<b>IC</b>																				
C360	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V																					
C361	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V	IC200	8-759-450-93	IC NJM2521M-TE1																		
C362	1-126-964-11	ELECT	10MF	20%	50V	IC202	8-759-100-96	IC NJM4558M-TE2																		
C400	1-126-963-11	ELECT	4.7MF	20%	50V	IC301	8-752-083-09	IC CXA2061S																		
C401	1-126-956-91	ELECT	0.1MF	20%	50V	IC302	8-752-385-80	IC CXD2073S																		
C402	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	IC401	8-759-490-17	IC TDA7057AQ/N2																		
C403	1-126-963-11	ELECT	4.7MF	20%	50V	IC402	8-752-072-39	IC CXA2021S																		
C404	1-126-963-11	ELECT	4.7MF	20%	50V																					
C405	1-126-963-11	ELECT	4.7MF	20%	50V																					

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## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21SE80C**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
<u>JACK</u>											
J200	1-580-441-61	JACK, PIN 2P	R215	1-216-033-00	RES,CHIP	220	5%	1/10W			
J201	1-580-443-21	JACK, PIN 3P	R216	1-216-113-00	RES,CHIP	470K	5%	1/10W			
J202	1-691-110-11	JACK, PIN 3P	R217	1-216-033-00	RES,CHIP	220	5%	1/10W			
			R218	1-216-067-00	RES,CHIP	5.6K	5%	1/10W			
			R219	1-216-073-00	RES,CHIP	10K	5%	1/10W			
<u>COIL</u>											
L352	1-412-031-11	INDUCTOR CHIP 47UH	R220	1-216-073-00	RES,CHIP	10K	5%	1/10W			
			R221	1-216-073-00	RES,CHIP	10K	5%	1/10W			
			R222	1-216-067-00	RES,CHIP	5.6K	5%	1/10W			
			R223	1-249-429-11	CARBON	10K	5%	1/4W			
			R224	1-249-429-11	CARBON	10K	5%	1/4W			
<u>IC LINK</u>											
PS201	1-532-984-11	LINK, IC	R225	1-216-073-00	RES,CHIP	10K	5%	1/10W			
<u>TRANSISTOR</u>											
Q200	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	R226	1-216-065-91	RES,CHIP	4.7K	5%	1/10W			
Q201	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	R227	1-216-097-91	RES,CHIP	100K	5%	1/10W			
Q206	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	R228	1-216-065-91	RES,CHIP	4.7K	5%	1/10W			
Q207	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	R229	1-216-097-91	RES,CHIP	100K	5%	1/10W			
Q350	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	R232	1-216-073-00	RES,CHIP	10K	5%	1/10W			
Q351	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	R233	1-216-073-00	RES,CHIP	10K	5%	1/10W			
Q352	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	R234	1-216-055-00	RES,CHIP	1.8K	5%	1/10W			
Q353	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	R235	1-216-055-00	RES,CHIP	1.8K	5%	1/10W			
Q354	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	R237	1-247-815-91	CARBON	220	5%	1/4W			
Q355	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	R238	1-249-417-11	CARBON	1K	5%	1/4W			
Q356	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	R241	1-216-065-91	RES,CHIP	4.7K	5%	1/10W			
Q357	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	R247	1-216-025-91	RES,CHIP	100	5%	1/10W			
Q358	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	R248	1-216-025-91	RES,CHIP	100	5%	1/10W			
Q359	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	R249	1-216-081-00	RES,CHIP	22K	5%	1/10W			
Q380	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	R250	1-216-081-00	RES,CHIP	22K	5%	1/10W			
Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	R268	1-216-081-00	RES,CHIP	22K	5%	1/10W			
<u>RESISTOR</u>											
R010	1-216-033-00	RES,CHIP	R269	1-216-081-00	RES,CHIP	22K	5%	1/10W			
R011	1-247-815-91	CARBON	R283	1-216-022-00	RES,CHIP	75	5%	1/10W			
R051	1-216-033-00	RES,CHIP	R284	1-216-295-91	SHORT						
R053	1-247-815-91	CARBON	R287	1-216-065-91	RES,CHIP	4.7K	5%	1/10W			
R070	1-249-425-11	CARBON	R303	1-216-025-91	RES,CHIP	100	5%	1/10W			
R071	1-249-425-11	CARBON	R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W			
R072	1-247-815-91	CARBON	R350	1-208-766-11	RES,CHIP	220	1%	1/10W			
R080	1-249-429-11	CARBON	R351	1-208-766-11	RES,CHIP	220	1%	1/10W			
R086	1-216-073-00	RES,CHIP	R352	1-208-794-11	RES,CHIP	3.3K	1%	1/10W			
R202	1-216-113-00	RES,CHIP	R354	1-208-794-11	RES,CHIP	3.3K	1%	1/10W			
R204	1-216-022-00	RES,CHIP	R357	1-216-091-00	RES,CHIP	56K	5%	1/10W			
R205	1-247-895-91	CARBON	R358	1-216-043-91	RES,CHIP	560	5%	1/10W			
R206	1-247-895-91	CARBON	R359	1-216-057-00	RES,CHIP	2.2K	5%	1/10W			
R214	1-216-113-00	RES,CHIP	R360	1-216-081-00	RES,CHIP	22K	5%	1/10W			
			R361	1-216-049-91	RES,CHIP	1K	5%	1/10W			
			R362	1-216-043-91	RES,CHIP	560	5%	1/10W			
			R363	1-216-037-00	RES,CHIP	330	5%	1/10W			
			R364	1-216-025-91	RES,CHIP	100	5%	1/10W			



## Note:

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

## Note:

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

KV-21SE80C

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
R365	1-216-025-91	RES,CHIP	100	5%	1/10W	R627	1-249-441-11	CARBON	100K	5%	1/4W
R366	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	R628	1-249-425-11	CARBON	4.7K	5%	1/4W
R367	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R629	1-247-807-31	CARBON	100	5%	1/4W
R368	1-216-025-91	RES,CHIP	100	5%	1/10W	R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W
R369	1-216-045-00	RES,CHIP	680	5%	1/10W	R691	1-249-399-11	CARBON	33	5%	1/4W
R370	1-216-295-91	SHORT				R692	1-249-399-11	CARBON	33	5%	1/4W
R372	1-216-035-00	RES,CHIP	270	5%	1/10W	<u>RELAY</u>					
R373	1-216-025-91	RES,CHIP	100	5%	1/10W	RY601 △ 1-755-018-11 RELAY					
R374	1-216-025-91	RES,CHIP	100	5%	1/10W	<u>TRANSFORMER</u>					
R375	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	T504 △ 1-453-211-11 TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)					
R376	1-216-049-91	RES,CHIP	1K	5%	1/10W	T603 △ 1-431-675-11 TRANSFORMER, CONVERTER (PIT)					
R377	1-216-049-91	RES,CHIP	1K	5%	1/10W	<u>THERMISTOR</u>					
R378	1-216-041-00	RES,CHIP	470	5%	1/10W	THP601 1-809-827-11 THERMISTOR, POSITIVE					
R379	1-216-049-91	RES,CHIP	1K	5%	1/10W	<u>TUNER</u>					
R380	1-208-790-11	RES,CHIP	2.2K	1%	1/10W	TU101 △ 8-598-431-00 TUNER, FSS BTF-WA411					
R382	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	<u>VARISTOR</u>					
R387	1-216-025-91	RES,CHIP	100	5%	1/10W	VDR601△ 1-809-267-41 VARISTOR ERZV10D471					
R388	1-216-025-91	RES,CHIP	100	5%	1/10W	VDR602 1-809-267-41 VARISTOR ERZV10D471					
R395	1-216-025-91	RES,CHIP	100	5%	1/10W						
R396	1-216-025-91	RES,CHIP	100	5%	1/10W						
R397	1-216-025-91	RES,CHIP	100	5%	1/10W						
R400	1-247-863-91	CARBON	22K	5%	1/4W						
R402	1-216-121-91	RES,CHIP	1M	5%	1/10W						
R403	1-247-815-91	CARBON	220	5%	1/4W						
R404	1-247-815-91	CARBON	220	5%	1/4W						
R432	1-249-429-11	CARBON	10K	5%	1/4W						
R502	△ 1-215-923-00	METAL OXIDE	10K	5%	3W F						
R508	△ 1-215-864-00	METAL OXIDE	150	5%	1W F						
R533	1-215-461-00	METAL	47K	1%	1/4W						
R534	1-215-453-00	METAL	22K	1%	1/4W						
R561	1-216-349-00	METAL OXIDE	1	5%	1W F						
R562	1-216-349-00	METAL OXIDE	1	5%	1W F						
R574	1-249-417-11	CARBON	1K	5%	1/4W F						
R578	1-216-467-11	METAL OXIDE	56K	5%	2W F						
☒ R582	1-208-826-11	RES,CHIP	68K	1%	1/10W						
R591	1-215-880-00	METAL OXIDE	10	5%	2W F						
R601	△ 1-247-289-00	CARBON	8.2M	5%	1W						
R603	△ 1-202-962-11	CEMENTED	3.3	5%	10W						
R604	1-247-889-00	CARBON	270K	5%	1/4W						
R605	1-247-889-00	CARBON	270K	5%	1/4W						
R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F						
R612	1-216-357-00	METAL OXIDE	4.7	5%	1W F						
R613	1-216-357-00	METAL OXIDE	4.7	5%	1W F						
R618	1-212-942-00	FUSIBLE	2.2	5%	1/2W F						
R623	1-249-437-11	CARBON	47K	5%	1/4W						

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21ME40**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-21ME40</b>																	
<u>CAPACITOR</u>																	
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	J201	1-580-441-71	JACK, PIN 2P									
C204	1-107-698-11	ELECT	10MF	20%	25V	J202	1-580-441-41	JACK, PIN 2P									
C205	1-126-960-11	ELECT	1MF	20%	50V	<u>IC LINK</u>											
C214	1-126-957-11	ELECT	0.22MF	20%	50V	PS201	1-532-984-11	LINK, IC									
C216	1-126-959-11	ELECT	0.47MF	20%	50V	<u>TRANSISTOR</u>											
C220	1-126-941-11	ELECT	470MF	20%	25V	Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA									
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<u>RESISTOR</u>											
C312	1-126-942-61	ELECT	1000MF	20%	25V	R072	1-247-815-91	CARBON	220	5%	1/4W						
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R205	1-247-895-91	CARBON	470K	5%	1/4W						
C418	1-126-964-11	ELECT	10MF	20%	50V	R230	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C505 $\Delta$	1-162-115-00	CERAMIC	330PF	10%	2KV	R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C507 $\Delta$	1-119-865-11	MYLAR	5700PF	3%	2KV	R234	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C511 $\Delta$	1-117-665-11	FILM	0.33MF	5%	200V	R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C591 $\Delta$	1-137-150-11	MYLAR	0.01MF	10%	100V	R237	1-247-815-91	CARBON	220	5%	1/4W						
C601 $\Delta$	1-136-311-51	FILM	0.47MF	20%	125V	R238	1-249-417-11	CARBON	1K	5%	1/4W						
C607 $\Delta$	1-117-941-11	ELECT(BLOCK)	470MF	20%	250V	R246	1-216-295-91	SHORT									
C614 $\Delta$	1-129-723-00	FILM	0.056MF	5%	630V	R268	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C625	1-126-960-11	ELECT	1MF	20%	50V	R269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C699	1-164-645-11	CERAMIC	1000PF	10%	500V	R284	1-216-295-91	SHORT									
<u>CONNECTOR</u>																	
CN401	1-564-505-11	PLUG, CONNECTOR 2P				R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
<u>DIODE</u>																	
D002	1-810-039-21	LED UNIT				R400	1-247-863-91	CARBON	22K	5%	1/4W						
D203	8-719-110-17	DIODE MTZJ-T-77-10B				R432	1-249-429-11	CARBON	10K	5%	1/4W						
D209	8-719-110-17	DIODE MTZJ-T-77-10B				R502 $\Delta$	1-215-923-00	METAL OXIDE	10K	5%	3W F						
D215	8-719-110-17	DIODE MTZJ-T-77-10B				R508 $\Delta$	1-215-864-00	METAL OXIDE	150	5%	1W F						
D619	8-719-991-33	DIODE 1SS133T-77				R533	1-215-461-00	METAL	47K	1%	1/4W						
<u>FUSE</u>																	
F601 $\Delta$	1-533-795-11	LINK, FUSE				R534	1-215-453-00	METAL	22K	1%	1/4W						
<u>IC</u>																	
IC301	8-752-083-09	IC CXA2061S				R561	1-216-349-00	METAL OXIDE	1	5%	1W F						
IC401	8-759-490-17	IC TDA7057AQ/N2				R562	1-216-349-00	METAL OXIDE	1	5%	1W F						
<u>FUSE</u>																	
F601 $\Delta$	1-533-795-11	LINK, FUSE				R574	1-249-417-11	CARBON	1K	5%	1/4W F						
<u>IC</u>																	
IC301	8-752-083-09	IC CXA2061S				R578	1-216-467-11	METAL OXIDE	56K	5%	2W F						
IC401	8-759-490-17	IC TDA7057AQ/N2				R582	1-208-826-11	RES,CHIP	68K	1%	1/10W						
<u>IC</u>																	
R591	1-215-880-00	METAL OXIDE	10	5%	2W F	R600 $\Delta$	1-219-513-11	CARBON	4.7M	5%	1/2W						
R603 $\Delta$	1-205-998-11	CEMENTED	1	5%	10W	R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F						

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-21ME40**

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK
R612	1-216-349-00	METAL OXIDE	1	5%	1W	F			
R613	1-216-349-00	METAL OXIDE	1	5%	1W	F			
R615	1-247-893-11	CARBON	390K	5%	1/4W				
R618	1-212-857-00	FUSIBLE	10	5%	1/4W	F			
R623	1-249-441-11	CARBON	100K	5%	1/4W				
R627	1-249-441-11	CARBON	100K	5%	1/4W				
R628	1-249-425-11	CARBON	4.7K	5%	1/4W				
R629	1-247-807-31	CARBON	100	5%	1/4W				
R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W				
R691	1-247-791-91	CARBON	22	5%	1/4W				
R692	1-247-791-91	CARBON	22	5%	1/4W				
<b><u>RELAY</u></b>									
RY601 Δ 1-755-018-11 RELAY									
<b><u>SWITCH</u></b>									
S001	1-692-431-21	SWITCH, TACTILE							
S002	1-692-431-21	SWITCH, TACTILE							
S003	1-692-431-21	SWITCH, TACTILE							
S004	1-692-431-21	SWITCH, TACTILE							
S005	1-692-431-21	SWITCH, TACTILE							
S006	1-692-431-21	SWITCH, TACTILE							
S007	1-692-431-21	SWITCH, TACTILE							
<b><u>TRANSFORMER</u></b>									
T504 Δ 1-453-211-11 TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)									
T603 Δ 1-431-674-11 TRANSFORMER, CONVERTER (PIT)									
<b><u>THERMISTOR</u></b>									
THP601	1-810-597-11	THERMISTOR, POSITIVE							
<b><u>TUNER</u></b>									
TU101 Δ 8-598-430-00 TUNER, FSS BTF-FA401									
<b><u>VARISTOR</u></b>									
VDR601 Δ 1-801-074-41 VARISTOR ERZV10D271									
VDR602 1-801-074-41 VARISTOR ERZV10D271									

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## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-13M50/13M51**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-13M50/13M51</b>																	
<u>CAPACITOR</u>																	
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	R072	1-247-815-91	CARBON	220	5%	1/4W						
C204	1-107-698-11	ELECT	10MF	20%	25V	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C205	1-126-960-11	ELECT	1MF	20%	50V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	R205	1-247-895-91	CARBON	470K	5%	1/4W						
C312	1-126-933-11	ELECT	100MF	20%	16V	R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R246	1-216-295-91	SHORT	R269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W			
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R284	1-216-295-91	SHORT	R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W			
C418	1-126-964-11	ELECT	10MF	20%	50V	R400	1-249-438-11	CARBON	56K	5%	1/4W						
C507 $\Delta$	1-117-836-11	FILM	6800PF	3%	2KV	R432	1-247-863-91	CARBON	22K	5%	1/4W						
C511 $\Delta$	1-119-967-11	FILM	0.43MF	5%	200V	R502 $\Delta$	1-215-924-00	METAL OXIDE	15K	5%	3W F						
C551	1-162-114-00	CERAMIC	0.0047MF			R508 $\Delta$	1-215-863-11	METAL OXIDE	100	5%	1W F						
C591 $\Delta$	1-137-350-11	MYLAR	0.015MF	10%	100V	R533	1-215-465-00	METAL	68K	1%	1/4W						
C601 $\Delta$	1-136-311-51	FILM	0.47MF	20%	125V	R534	1-215-449-00	METAL	15K	1%	1/4W						
C607 $\Delta$	1-117-893-11	ELECT	470MF	20%	250V	R551	1-215-870-11	METAL OXIDE	1.5K	5%	1W F						
C614 $\Delta$	1-129-723-00	FILM	0.056MF	5%	630V	R561	1-216-359-00	METAL OXIDE	6.8	5%	1W F						
C699	1-164-645-11	CERAMIC	1000PF	10%	500V	R562	1-216-359-00	METAL OXIDE	6.8	5%	1W F						
<u>DIODE</u>																	
D002	1-810-039-21	LED UNIT				R574	1-249-416-11	CARBON	820	5%	1/4W F						
D203	8-719-110-17	DIODE MTZ-T-77-10B				R578	1-215-902-11	METAL OXIDE	47K	5%	2W F						
D209	8-719-110-17	DIODE MTZ-T-77-10B				R582	1-208-850-11	RES,CHIP	680K	1%	1/10W						
D215	8-719-110-17	DIODE MTZ-T-77-10B				R591	1-215-882-00	METAL OXIDE	22	5%	2W F						
D551	8-719-028-72	DIODE RGP02-17PKG23				R600 $\Delta$	1-219-513-11	CARBON	4.7M	5%	1/2W						
<u>FUSE</u>																	
F601 $\Delta$	1-533-795-11	LINK, FUSE				R603 $\Delta$	1-205-998-11	CEMENTED	1	5%	10W						
<u>IC</u>																	
IC301	8-752-083-09	IC CXA2061S				R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F						
IC400	8-759-490-18	IC TDA7056B/N1				R612	1-216-349-00	METAL OXIDE	1	5%	1W F						
<u>JACK</u>																	
J201	1-580-441-71	JACK, PIN 2P				R613	1-216-349-00	METAL OXIDE	1	5%	1W F						
J202	1-580-441-41	JACK, PIN 2P				R615	1-247-893-11	CARBON	390K	5%	1/4W						
<u>IC LINK</u>																	
PS201	1-532-637-00	LINK, IC				R618	1-212-857-00	FUSIBLE	10	5%	1/4W F						
<u>RELAY</u>																	
RY601 $\Delta$ 1-755-146-11 RELAY, AC POWER																	
<u>SWITCH</u>																	
S001	1-571-532-21	SWITCH, TACTILE				S002	1-571-532-21	SWITCH, TACTILE									

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-13M50/13M51**

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
S003	1-571-532-21	SWITCH, TACTILE					
S004	1-571-532-21	SWITCH, TACTILE					
S005	1-571-532-21	SWITCH, TACTILE					
S006	1-571-532-21	SWITCH, TACTILE					
<b><u>TRANSFORMER</u></b>							
T504	△ 1-453-210-11	TRANSFORMER ASSY, FLYBACK (NX-1731//X4E4)					
T603	△ 1-431-674-11	TRANSFORMER, CONVERTER (PIT)					
<b><u>THERMISTOR</u></b>							
THP601	1-810-597-11	THERMISTOR, POSITIVE					
<b><u>TUNER</u></b>							
TU101	△ 8-598-430-00	TUNER, FSS BTF-FA401					
<b><u>VARISTOR</u></b>							
VDR601	△ 1-801-074-41	VARISTOR ERZV10D271					
VDR602	1-801-074-41	VARISTOR ERZV10D271					

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21XT4A**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-21XT4A</b>																	
<u>CAPACITOR</u>																	
C202	1-126-960-11	ELECT	1MF	20%	50V	IC200	8-759-450-93	IC NJM2521M-TE1									
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	IC301	8-752-082-35	IC CXA2060AS									
C204	1-107-698-11	ELECT	10MF	20%	25V	IC401	8-759-490-17	IC TDA7057AQ/N2									
C205	1-126-960-11	ELECT	1MF	20%	50V	<u>JACK</u>											
C206	1-126-960-11	ELECT	1MF	20%	50V	J201	1-580-443-21	JACK, PIN 3P									
C214	1-126-957-11	ELECT	0.22MF	20%	50V	J202	1-691-110-11	JACK, PIN 3P									
C216	1-126-959-11	ELECT	0.47MF	20%	50V	<u>IC LINK</u>											
C220	1-126-941-11	ELECT	470MF	20%	25V	PS201	1-532-984-11	LINK, IC									
C233	1-126-960-11	ELECT	1MF	20%	50V	<u>TRANSISTOR</u>											
C300	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA									
C302	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	<u>RESISTOR</u>											
C309	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	R010	1-216-033-00	RES,CHIP	220	5%	1/10W						
C312	1-126-942-61	ELECT	1000MF	20%	25V	R011	1-247-815-91	CARBON	220	5%	1/4W						
C320	1-126-957-11	ELECT	0.22MF	20%	50V	R051	1-216-033-00	RES,CHIP	220	5%	1/10W						
C321	1-163-259-91	CERAMIC CHIP	220PF	5%	50V	R070	1-249-425-11	CARBON	4.7K	5%	1/4W						
C359	8-719-158-15	DIODE UDV-TE-17-5.6B				R071	1-249-425-11	CARBON	4.7K	5%	1/4W						
C418	1-126-964-11	ELECT	10MF	20%	50V	R072	1-247-815-91	CARBON	220	5%	1/4W						
C505 $\Delta$	1-162-115-00	CERAMIC	330PF	10%	2KV	R081	1-249-413-11	CARBON	470	5%	1/4W						
C507 $\Delta$	1-119-865-11	MYLAR	5700PF	3%	2KV	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C511 $\Delta$	1-117-665-11	FILM	0.33MF	5%	200V	R202	1-216-113-00	RES,CHIP	470K	5%	1/10W						
C591 $\Delta$	1-137-150-11	MYLAR	0.01MF	10%	100V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C601 $\Delta$	1-136-311-61	FILM	0.47MF	20%	300V	R205	1-247-895-91	CARBON	470K	5%	1/4W						
C607 $\Delta$	1-125-731-11	ELECT(BLOCK)	270MF	20%	400V	R206	1-247-895-91	CARBON	470K	5%	1/4W						
C614 $\Delta$	1-137-347-11	FILM	0.022MF	3%	2KV	R230	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C625	1-126-960-11	ELECT	1MF	20%	50V	R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
<u>CONNECTOR</u>																	
CN401	1-564-505-11	PLUG, CONNECTOR 2P				R234	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
<u>DIODE</u>																	
D002	1-810-039-11	LED UNIT				R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
D202	8-719-110-17	DIODE MTZJ-T-77-10B				R237	1-247-815-91	CARBON	220	5%	1/4W						
D203	8-719-110-17	DIODE MTZJ-T-77-10B				R238	1-249-417-11	CARBON	1K	5%	1/4W						
D204	8-719-110-17	DIODE MTZJ-T-77-10B				R241	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
D209	8-719-110-17	DIODE MTZJ-T-77-10B				R268	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
D619	8-719-991-33	DIODE 1SS133T-77				R269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
<u>FUSE</u>																	
F601 $\Delta$	1-532-506-51	FUSE				R284	1-216-295-91	SHORT									

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-21XT4A**

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK
R400	1-247-863-91	CARBON	22K	5%	1/4W				
R432	1-249-429-11	CARBON	10K	5%	1/4W				
R502 Δ	1-215-923-00	METAL OXIDE	10K	5%	3W F				
R508 Δ	1-215-864-00	METAL OXIDE	150	5%	1W F				
R533	1-215-461-00	METAL	47K	1%	1/4W				
R534	1-215-453-00	METAL	22K	1%	1/4W				
R561	1-216-349-00	METAL OXIDE	1	5%	1W F				
R562	1-216-349-00	METAL OXIDE	1	5%	1W F				
R574	1-249-417-11	CARBON	1K	5%	1/4W F				
R578	1-216-467-11	METAL OXIDE	56K	5%	2W F				
☒ R582	1-208-826-11	RES,CHIP	68K	1%	1/10W				
R591	1-215-880-00	METAL OXIDE	10	5%	2W F				
R601 Δ	1-247-289-00	CARBON	8.2M	5%	1W				
R603 Δ	1-202-962-11	CEMENTED	3.3	5%	10W				
R604	1-247-889-00	CARBON	270K	5%	1/4W				
R605	1-247-889-00	CARBON	270K	5%	1/4W				
R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F				
R612	1-216-357-00	METAL OXIDE	4.7	5%	1W F				
R613	1-216-357-00	METAL OXIDE	4.7	5%	1W F				
R618	1-212-942-00	FUSIBLE	2.2	5%	1/2W F				
R623	1-249-437-11	CARBON	47K	5%	1/4W				
R627	1-249-441-11	CARBON	100K	5%	1/4W				
R628	1-249-425-11	CARBON	4.7K	5%	1/4W				
R629	1-247-807-31	CARBON	100	5%	1/4W				
R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W				
R691	1-249-399-11	CARBON	33	5%	1/4W				
R692	1-249-399-11	CARBON	33	5%	1/4W				
<b><u>RELAY</u></b>									
RY601 Δ 1-755-018-11 RELAY									
<b><u>SWITCH</u></b>									
S001	1-692-431-21	SWITCH, TACTILE							
S002	1-692-431-21	SWITCH, TACTILE							
S003	1-692-431-21	SWITCH, TACTILE							
S004	1-692-431-21	SWITCH, TACTILE							
S005	1-692-431-21	SWITCH, TACTILE							
S006	1-692-431-21	SWITCH, TACTILE							
S007	1-692-431-21	SWITCH, TACTILE							
<b><u>TRANSFORMER</u></b>									
T504 Δ 1-453-211-11 TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)									
T603 Δ 1-431-675-11 TRANSFORMER, CONVERTER (PIT)									

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21ME40C**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-21ME40C</b>																	
<b>CAPACITOR</b>																	
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	PS201	1-532-984-11	LINK, IC									
C204	1-107-698-11	ELECT	10MF	20%	25V	Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA									
C205	1-126-960-11	ELECT	1MF	20%	50V	<b>TRANSISTOR</b>											
C214	1-126-957-11	ELECT	0.22MF	20%	50V	R072	1-247-815-91	CARBON	220	5%	1/4W						
C216	1-126-959-11	ELECT	0.47MF	20%	50V	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C220	1-126-941-11	ELECT	470MF	20%	25V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	R205	1-247-895-91	CARBON	470K	5%	1/4W						
C312	1-126-942-61	ELECT	1000MF	20%	25V	R230	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R234	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C418	1-126-964-11	ELECT	10MF	20%	50V	R237	1-247-815-91	CARBON	220	5%	1/4W						
C505 $\Delta$	1-162-115-00	CERAMIC	330PF	10%	2KV	R238	1-249-417-11	CARBON	1K	5%	1/4W						
C507 $\Delta$	1-119-865-11	MYLAR	5700PF	3%	2KV	R246	1-216-295-91	SHORT									
C511 $\Delta$	1-117-665-11	FILM	0.33MF	5%	200V	R268	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C591 $\Delta$	1-137-150-11	MYLAR	0.01MF	10%	100V	R269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C601 $\Delta$	1-136-311-61	FILM	0.47MF	20%	300V	R284	1-216-295-91	SHORT									
C607 $\Delta$	1-125-731-11	ELECT(BLOCK)	270MF	20%	400V	R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
C614 $\Delta$	1-137-347-11	FILM	0.022MF	3%	2KV	R400	1-247-863-91	CARBON	22K	5%	1/4W						
C625	1-126-960-11	ELECT	1MF	20%	50V	R432	1-249-429-11	CARBON	10K	5%	1/4W						
<b>CONNECTOR</b>																	
CN401	1-564-505-11	PLUG, CONNECTOR 2P				R502 $\Delta$	1-215-923-00	METAL OXIDE	10K	5%	3W F						
<b>DIODE</b>																	
D002	1-810-039-21	LED UNIT				R508 $\Delta$	1-215-864-00	METAL OXIDE	150	5%	1W F						
D203	8-719-110-17	DIODE MTZJ-T-77-10B				R533	1-215-461-00	METAL	47K	1%	1/4W						
D209	8-719-110-17	DIODE MTZJ-T-77-10B				R534	1-215-453-00	METAL	22K	1%	1/4W						
D215	8-719-110-17	DIODE MTZJ-T-77-10B				R561	1-216-349-00	METAL OXIDE	1	5%	1W F						
D619	8-719-991-33	DIODE 1SS133T-77				R562	1-216-349-00	METAL OXIDE	1	5%	1W F						
<b>FUSE</b>																	
F601 $\Delta$	1-532-506-51	FUSE				R574	1-249-417-11	CARBON	1K	5%	1/4W F						
<b>IC</b>																	
IC301	8-752-083-09	IC CXA2061S				R578	1-216-467-11	METAL OXIDE	56K	5%	2W F						
IC401	8-759-490-17	IC TDA7057AQ/N2				R582	1-208-826-11	RES,CHIP	68K	1%	1/10W						
<b>JACK</b>																	
J201	1-580-441-71	JACK, PIN 2P				R591	1-215-880-00	METAL OXIDE	10	5%	2W F						
J202	1-580-441-41	JACK, PIN 2P				R601 $\Delta$	1-247-289-00	CARBON	8.2M	5%	1W						
<b>IC</b>																	
R604	1-247-889-00	CARBON				R603 $\Delta$	1-202-962-11	CEMENTED	3.3	5%	10W						
R605	1-247-889-00	CARBON				R604	1-247-889-00	CARBON	270K	5%	1/4W						
R606	1-202-933-61	FUSIBLE				R605	1-247-889-00	CARBON	270K	5%	1/4W						
R612	1-216-357-00	METAL OXIDE				R606	1-216-357-00	METAL OXIDE	4.7	5%	1W F						
R613	1-216-357-00	METAL OXIDE				R612	1-216-357-00	METAL OXIDE	4.7	5%	1W F						
<b>FUSE</b>																	
R618	1-212-942-00	FUSIBLE				R618	1-212-942-00	FUSIBLE	2.2	5%	1/2W F						
R623	1-249-437-11	CARBON				R623	1-249-437-11	CARBON	47K	5%	1/4W						
R627	1-249-441-11	CARBON				R627	1-249-441-11	CARBON	100K	5%	1/4W						

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-21ME40C**

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK
R628	1-249-425-11	CARBON	4.7K	5%	1/4W				
R629	1-247-807-31	CARBON	100	5%	1/4W				
R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W				
R691	1-249-399-11	CARBON	33	5%	1/4W				
R692	1-249-399-11	CARBON	33	5%	1/4W				
<b><u>RELAY</u></b>									
RY601 Δ 1-755-018-11 RELAY									
<b><u>SWITCH</u></b>									
S001	1-692-431-21	SWITCH, TACTILE							
S002	1-692-431-21	SWITCH, TACTILE							
S003	1-692-431-21	SWITCH, TACTILE							
S004	1-692-431-21	SWITCH, TACTILE							
S005	1-692-431-21	SWITCH, TACTILE							
S006	1-692-431-21	SWITCH, TACTILE							
S007	1-692-431-21	SWITCH, TACTILE							
<b><u>TRANSFORMER</u></b>									
T504 Δ 1-453-211-11 TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)									
T603 Δ 1-431-675-11 TRANSFORMER, CONVERTER (PIT)									
<b><u>THERMISTOR</u></b>									
THP601 1-809-827-11 THERMISTOR, POSITIVE									
<b><u>TUNER</u></b>									
TU101 Δ 8-598-430-00 TUNER, FSS BTF-FA401									
<b><u>VARISTOR</u></b>									
VDR601 Δ 1-809-267-41 VARISTOR ERZV10D471									
VDR602 1-809-267-41 VARISTOR ERZV10D471									

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## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21SB40M/21SB40P**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
<b>A BOARD VARIANT LIST: KV-21SB40M/21SB40P</b>								
<u>CAPACITOR</u>								
C202	1-126-960-11	ELECT	1MF	20%	50V	IC200	8-759-450-93	IC NJM2521M-TE1
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	IC301	8-752-083-09	IC CXA2061S
C204	1-107-698-11	ELECT	10MF	20%	25V	IC401	8-759-490-17	IC TDA7057AQ/N2
C205	1-126-960-11	ELECT	1MF	20%	50V			
C206	1-126-960-11	ELECT	1MF	20%	50V	<u>JACK</u>		
C214	1-126-957-11	ELECT	0.22MF	20%	50V	J201	1-580-443-21	JACK, PIN 3P
C216	1-126-959-11	ELECT	0.47MF	20%	50V	J202	1-691-110-11	JACK, PIN 3P
C220	1-126-941-11	ELECT	470MF	20%	25V	<u>IC LINK</u>		
C233	1-126-960-11	ELECT	1MF	20%	50V	PS201	1-532-984-11	LINK,IC
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<u>TRANSISTOR</u>		
C312	1-126-942-61	ELECT	1000MF	20%	25V	Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA
C320	1-126-959-11	ELECT	0.47MF	20%	50V	<u>RESISTOR</u>		
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R010	1-216-033-00	RES,CHIP
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R011	1-247-815-91	CARBON
C418	1-126-964-11	ELECT	10MF	20%	50V	R051	1-216-033-00	RES,CHIP
C505 $\Delta$	1-162-115-00	CERAMIC	330PF	10%	2KV	R070	1-249-425-11	CARBON
C507 $\Delta$	1-119-865-11	MYLAR	5700PF	3%	2KV	R071	1-249-425-11	CARBON
C511 $\Delta$	1-117-665-11	FILM	0.33MF	5%	200V	R072	1-247-815-91	CARBON
C591 $\Delta$	1-137-150-11	MYLAR	0.01MF	10%	100V	R086	1-216-073-00	RES,CHIP
C601 $\Delta$	1-136-311-51	FILM	0.47MF	20%	125V	R202	1-216-113-00	RES,CHIP
C607 $\Delta$	1-117-941-11	ELECT(BLOCK)	470MF	20%	250V	R204	1-216-022-00	RES,CHIP
C614 $\Delta$	1-129-723-00	FILM	0.056MF	5%	630V	R205	1-247-895-91	CARBON
C625	1-126-960-11	ELECT	1MF	20%	50V	R206	1-247-895-91	CARBON
C699	1-164-645-11	CERAMIC	1000PF	10%	500V	R230	1-216-073-00	RES,CHIP
<u>CONNECTOR</u>								
CN401	1-564-505-11	PLUG, CONNECTOR 2P			R231	1-216-073-00	RES,CHIP	
<u>DIODE</u>								
D002	1-810-039-21	LED UNIT			R234	1-216-057-00	RES,CHIP	
D202	8-719-110-17	DIODE MTZJ-T-77-10B			R235	1-216-057-00	RES,CHIP	
D203	8-719-110-17	DIODE MTZJ-T-77-10B			R237	1-247-815-91	CARBON	
D204	8-719-110-17	DIODE MTZJ-T-77-10B			R238	1-249-417-11	CARBON	
D209	8-719-110-17	DIODE MTZJ-T-77-10B			R241	1-216-065-91	RES,CHIP	
D619	8-719-991-33	DIODE 1SS133T-77			R268	1-216-057-00	RES,CHIP	
<u>FUSE</u>								
F601 $\Delta$	1-533-795-11	LINK, FUSE			R284	1-216-295-91	SHORT	
<u>METAL OXIDE</u>								
R508 $\Delta$	1-215-864-00	METAL OXIDE			R307	1-216-065-91	RES,CHIP	
R533	1-215-461-00	METAL			R400	1-247-863-91	CARBON	
					R432	1-249-429-11	CARBON	
					R502 $\Delta$	1-215-923-00	METAL OXIDE	
					R508	1-215-864-00	METAL OXIDE	
					R533	1-215-461-00	METAL	

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-21SB40M/21SB40P**

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK
R534	1-215-453-00	METAL	22K	1%	1/4W			<u>VARISTOR</u>	
R561	1-216-349-00	METAL OXIDE	1	5%	1W F	VDR601	△ 1-801-074-41	VARISTOR ERZV10D271	
R562	1-216-349-00	METAL OXIDE	1	5%	1W F	VDR602	1-801-074-41	VARISTOR ERZV10D271	
R574	1-249-417-11	CARBON	1K	5%	1/4W F				
R578	1-216-467-11	METAL OXIDE	56K	5%	2W F				
■ R582	1-208-826-11	RES,CHIP	68K	1%	1/10W				
R591	1-215-880-00	METAL OXIDE	10	5%	2W F				
R600	△ 1-219-513-11	CARBON	4.7M	5%	1/2W				
R603	△ 1-205-998-11	CEMENTED	1	5%	10W				
R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F				
R612	1-216-349-00	METAL OXIDE	1	5%	1W F				
R613	1-216-349-00	METAL OXIDE	1	5%	1W F				
R615	1-247-893-11	CARBON	390K	5%	1/4W				
R618	1-212-857-00	FUSIBLE	10	5%	1/4W F				
R623	1-249-441-11	CARBON	100K	5%	1/4W				
R627	1-249-441-11	CARBON	100K	5%	1/4W				
R628	1-249-425-11	CARBON	4.7K	5%	1/4W				
R629	1-247-807-31	CARBON	100	5%	1/4W				
R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W				
R691	1-247-791-91	CARBON	22	5%	1/4W				
R692	1-247-791-91	CARBON	22	5%	1/4W				
<u>RELAY</u>									
RY601	△ 1-755-018-11	RELAY							
<u>SWITCH</u>									
S001	1-692-431-21	SWITCH, TACTILE							
S002	1-692-431-21	SWITCH, TACTILE							
S003	1-692-431-21	SWITCH, TACTILE							
S004	1-692-431-21	SWITCH, TACTILE							
S005	1-692-431-21	SWITCH, TACTILE							
S006	1-692-431-21	SWITCH, TACTILE							
S007	1-692-431-21	SWITCH, TACTILE							
<u>TRANSFORMER</u>									
T504	△ 1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)							
T603	△ 1-431-674-11	TRANSFORMER, CONVERTER (PIT)							
<u>THERMISTOR</u>									
THP601	1-810-597-11	THERMISTOR, POSITIVE							
<u>TUNER</u>									
TU101	△ 8-598-431-00	TUNER, FSS BTF-WA411							

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21SB40C**

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-21SB40C</b>																	
<u>CAPACITOR</u>																	
C202	1-126-960-11	ELECT	1MF	20%	50V	J201	1-580-443-21	JACK, PIN 3P	<u>JACK</u>								
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	J202	1-691-110-11	JACK, PIN 3P	<u>IC LINK</u>								
C204	1-107-698-11	ELECT	10MF	20%	25V	PS201	1-532-984-11	LINK, IC	<u>TRANSISTOR</u>								
C205	1-126-960-11	ELECT	1MF	20%	50V	Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	<u>RESISTOR</u>								
C206	1-126-960-11	ELECT	1MF	20%	50V	R010	1-216-033-00	RES,CHIP	220	5%	1/10W						
C214	1-126-957-11	ELECT	0.22MF	20%	50V	R011	1-247-815-91	CARBON	220	5%	1/4W						
C216	1-126-959-11	ELECT	0.47MF	20%	50V	R051	1-216-033-00	RES,CHIP	220	5%	1/10W						
C220	1-126-941-11	ELECT	470MF	20%	25V	R070	1-249-425-11	CARBON	4.7K	5%	1/4W						
C233	1-126-960-11	ELECT	1MF	20%	50V	R071	1-249-425-11	CARBON	4.7K	5%	1/4W						
C309	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	R072	1-247-815-91	CARBON	220	5%	1/4W						
C312	1-126-942-61	ELECT	1000MF	20%	25V	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C320	1-126-959-11	ELECT	0.47MF	20%	50V	R202	1-216-113-00	RES,CHIP	470K	5%	1/10W						
C321	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C359	8-719-158-15	DIODE	UDZ-TE-17-5.6B			R205	1-247-895-91	CARBON	470K	5%	1/4W						
C418	1-126-964-11	ELECT	10MF	20%	50V	R206	1-247-895-91	CARBON	470K	5%	1/4W						
C505	$\Delta$ 1-162-115-00	CERAMIC	330PF	10%	2KV	R230	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C507	$\Delta$ 1-119-865-11	MYLAR	5700PF	3%	2KV	R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C511	$\Delta$ 1-117-665-11	FILM	0.33MF	5%	200V	R234	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C591	$\Delta$ 1-137-150-11	MYLAR	0.01MF	10%	100V	R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
C601	$\Delta$ 1-136-311-61	FILM	0.47MF	20%	300V	R237	1-247-815-91	CARBON	220	5%	1/4W						
C607	$\Delta$ 1-125-731-11	ELECT(BLOCK)	270MF	20%	400V	R238	1-249-417-11	CARBON	1K	5%	1/4W						
C614	$\Delta$ 1-137-347-11	FILM	0.022MF	3%	2KV	R241	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
C625	1-126-960-11	ELECT	1MF	20%	50V	R268	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
<u>CONNECTOR</u>																	
CN401	1-564-505-11	PLUG, CONNECTOR 2P	<u>DIODE</u>			R269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
D002	1-810-039-21	LED UNIT	<u>FUSE</u>			R284	1-216-295-91	SHORT	<u>DIODE</u>								
D202	8-719-110-17	DIODE MTZJ-T-77-10B	<u>IC</u>			R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
D203	8-719-110-17	DIODE MTZJ-T-77-10B	<u>IC</u>			R400	1-247-863-91	CARBON	22K	5%	1/4W						
D204	8-719-110-17	DIODE MTZJ-T-77-10B	<u>IC</u>			R432	1-249-429-11	CARBON	10K	5%	1/4W						
D209	8-719-110-17	DIODE MTZJ-T-77-10B	<u>IC</u>			R502	$\Delta$ 1-215-923-00	METAL OXIDE	10K	5%	3W F						
D619	8-719-991-33	DIODE 1SS133T-77	<u>FUSE</u>			R508	$\Delta$ 1-215-864-00	METAL OXIDE	150	5%	1W F						
F601	$\Delta$ 1-532-506-51	FUSE	<u>IC</u>			R533	1-215-461-00	METAL	47K	1%	1/4W						
IC200	8-759-450-93	IC NJM2521M-TE1	<u>IC</u>			R534	1-215-453-00	METAL	22K	1%	1/4W						
IC301	8-752-083-09	IC CXA2061S	<u>IC</u>			R561	1-216-349-00	METAL OXIDE	1	5%	1W F						
IC401	8-759-490-17	IC TDA7057AQ/N2	<u>IC</u>			R562	1-216-349-00	METAL OXIDE	1	5%	1W F						
			<u>IC</u>			R574	1-249-417-11	CARBON	1K	5%	1/4W F						
			<u>IC</u>			R578	1-216-467-11	METAL OXIDE	56K	5%	2W F						
			<u>IC</u>			<input checked="" type="checkbox"/> R582	1-208-826-11	RES,CHIP	68K	1%	1/10W						

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-21SB40C**

REF.NO.	PART NO.	DESCRIPTION	REMARK		
R591	1-215-880-00	METAL OXIDE	10	5%	2W F
R601	△ 1-247-289-00	CARBON	8.2M	5%	1W
R603	△ 1-202-962-11	CEMENTED	3.3	5%	10W
R604	1-247-889-00	CARBON	270K	5%	1/4W
R605	1-247-889-00	CARBON	270K	5%	1/4W
R606	1-220-926-11	FUSIBLE	0.47	10%	1/2W F
R612	1-216-357-00	METAL OXIDE	4.7	5%	1W F
R613	1-216-357-00	METAL OXIDE	4.7	5%	1W F
R618	1-212-942-00	FUSIBLE	2.2	5%	1/2W F
R623	1-249-437-11	CARBON	47K	5%	1/4W
R627	1-249-441-11	CARBON	100K	5%	1/4W
R628	1-249-425-11	CARBON	4.7K	5%	1/4W
R629	1-247-807-31	CARBON	100	5%	1/4W
R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W
R691	1-249-399-11	CARBON	33	5%	1/4W
R692	1-249-399-11	CARBON	33	5%	1/4W

**RELAY**

RY601 △ 1-755-018-11 RELAY

**SWITCH**

S001	1-692-431-21	SWITCH, TACTILE
S002	1-692-431-21	SWITCH, TACTILE
S003	1-692-431-21	SWITCH, TACTILE
S004	1-692-431-21	SWITCH, TACTILE
S005	1-692-431-21	SWITCH, TACTILE
S006	1-692-431-21	SWITCH, TACTILE
S007	1-692-431-21	SWITCH, TACTILE

**TRANSFORMER**

T504 △ 1-453-211-11 TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)  
T603 △ 1-431-675-11 TRANSFORMER, CONVERTER (PIT)

**THERMISTOR**

THP601 1-809-827-11 THERMISTOR, POSITIVE

**TUNER**

TU101 △ 8-598-431-00 TUNER, FSS BTF-WA411

**VARISTOR**

VDR601△ 1-809-267-41 VARISTOR ERZV10D471  
VDR602 1-809-267-41 VARISTOR ERZV10D471

**A**

## BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

**KV-21SE40A**

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK								
<b>A BOARD VARIANT LIST: KV-21SE40A</b>																	
<u>CAPACITOR</u>																	
C202	1-126-960-11	ELECT	1MF	20%	50V	IC200	8-759-450-93	IC NJM2521M-TE1									
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	IC301	8-752-082-35	IC CXA2060AS									
C204	1-107-698-11	ELECT	10MF	20%	25V	IC401	8-759-490-17	IC TDA7057AQ/N2									
C205	1-126-960-11	ELECT	1MF	20%	50V	<u>JACK</u>											
C206	1-126-960-11	ELECT	1MF	20%	50V	J201	1-580-443-21	JACK, PIN 3P									
C214	1-126-957-11	ELECT	0.22MF	20%	50V	J202	1-691-110-11	JACK, PIN 3P									
C216	1-126-959-11	ELECT	0.47MF	20%	50V	<u>IC LINK</u>											
C220	1-126-941-11	ELECT	470MF	20%	25V	PS201	1-532-984-11	LINK, IC									
C233	1-126-960-11	ELECT	1MF	20%	50V	<u>TRANSISTOR</u>											
C300	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	Q603	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA									
C302	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	<u>RESISTOR</u>											
C309	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	R010	1-216-033-00	RES,CHIP	220	5%	1/10W						
C312	1-126-942-61	ELECT	1000MF	20%	25V	R011	1-247-815-91	CARBON	220	5%	1/4W						
C320	1-126-957-11	ELECT	0.22MF	20%	50V	R051	1-216-033-00	RES,CHIP	220	5%	1/10W						
C321	1-163-259-91	CERAMIC CHIP	220PF	5%	50V	R070	1-249-425-11	CARBON	4.7K	5%	1/4W						
C359	8-719-158-15	DIODE UDZ-TE-17-5.6B				R071	1-249-425-11	CARBON	4.7K	5%	1/4W						
C418	1-126-964-11	ELECT	10MF	20%	50V	R072	1-247-815-91	CARBON	220	5%	1/4W						
C505	△ 1-162-115-00	CERAMIC	330PF	10%	2KV	R081	1-249-413-11	CARBON	470	5%	1/4W						
C507	△ 1-119-865-11	MYLAR	5700PF	3%	2KV	R086	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C511	△ 1-117-665-11	FILM	0.33MF	5%	200V	R202	1-216-113-00	RES,CHIP	470K	5%	1/10W						
C591	△ 1-137-150-11	MYLAR	0.01MF	10%	100V	R204	1-216-022-00	RES,CHIP	75	5%	1/10W						
C601	△ 1-136-311-61	FILM	0.47MF	20%	300V	R205	1-247-895-91	CARBON	470K	5%	1/4W						
C607	△ 1-125-731-11	ELECT(BLOCK)	270MF	20%	400V	R206	1-247-895-91	CARBON	470K	5%	1/4W						
C614	△ 1-137-347-11	FILM	0.022MF	3%	2KV	R230	1-216-073-00	RES,CHIP	10K	5%	1/10W						
C625	1-126-960-11	ELECT	1MF	20%	50V	R231	1-216-073-00	RES,CHIP	10K	5%	1/10W						
<u>CONNECTOR</u>																	
CN401	1-564-505-11	PLUG, CONNECTOR 2P				R234	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
<u>DIODE</u>																	
D002	1-810-039-11	LED UNIT				R235	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
D202	8-719-110-17	DIODE MTZJ-T-77-10B				R237	1-247-815-91	CARBON	220	5%	1/4W						
D203	8-719-110-17	DIODE MTZJ-T-77-10B				R238	1-249-417-11	CARBON	1K	5%	1/4W						
D204	8-719-110-17	DIODE MTZJ-T-77-10B				R241	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
D209	8-719-110-17	DIODE MTZJ-T-77-10B				R268	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
D619	8-719-991-33	DIODE 1SS133T-77				R269	1-216-065-91	RES,CHIP	4.7K	5%	1/10W						
<u>FUSE</u>																	
F601	△ 1-532-506-51	FUSE				R284	1-216-295-91	SHORT									
<u></u>																	

**Note:**

The components identified with shading and a critical symbol (Δ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The parts on this page belong to the following model(s) only:

**KV-21SE40A**

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK
R400	1-247-863-91	CARBON	22K	5%	1/4W				
R432	1-247-854-11	CARBON	9.1K	5%	1/4W				
R502	△ 1-215-923-00	METAL OXIDE	10K	5%	3W F	THP601	1-809-827-11	THERMISTOR, POSITIVE	
R508	△ 1-215-864-00	METAL OXIDE	150	5%	1W F				
R533	1-215-461-00	METAL	47K	1%	1/4W				
R534	1-215-453-00	METAL	22K	1%	1/4W	TU101	△ 8-598-431-00	TUNER, FSS BTF-WA411	
R561	1-216-349-00	METAL OXIDE	1	5%	1W F				
R562	1-216-349-00	METAL OXIDE	1	5%	1W F	VDR601	△ 1-809-267-41	VARISTOR ERZV10D471	
R574	1-249-417-11	CARBON	1K	5%	1/4W F	VDR602	1-809-267-41	VARISTOR ERZV10D471	
R578	1-216-467-11	METAL OXIDE	56K	5%	2W F				
☒ R582	1-208-826-11	RES,CHIP	68K	1%	1/10W				
R591	1-215-880-00	METAL OXIDE	10	5%	2W F				
R601	△ 1-247-289-00	CARBON	8.2M	5%	1W				
R603	△ 1-202-962-11	CEMENTED	3.3	5%	10W				
R604	1-247-889-00	CARBON	270K	5%	1/4W	X300	1-579-972-11	CRYSTAL VIBRATOR, CRYSTAL	
R605	1-247-889-00	CARBON	270K	5%	1/4W	X301	1-579-973-11	CRYSTAL VIBRATOR, CRYSTAL	
R606	1-220-926-11	FUSIBLE	0.47	10%	1/2 F				
R612	1-216-357-00	METAL OXIDE	4.7	5%	1W F				
R613	1-216-357-00	METAL OXIDE	4.7	5%	1W F				
R618	1-212-942-00	FUSIBLE	2.2	5%	1/2W F				
R623	1-249-437-11	CARBON	47K	5%	1/4W				
R627	1-249-441-11	CARBON	100K	5%	1/4W				
R628	1-249-425-11	CARBON	4.7K	5%	1/4W				
R629	1-247-807-31	CARBON	100	5%	1/4W				
R636	1-208-798-11	RES,CHIP	4.7K	1%	1/10W				
R691	1-249-399-11	CARBON	33	5%	1/4W				
R692	1-249-399-11	CARBON	33	5%	1/4W				
<b><u>RELAY</u></b>									
RY601 △ 1-755-018-11 RELAY									
<b><u>SWITCH</u></b>									
S001	1-692-431-21	SWITCH, TACTILE							
S002	1-692-431-21	SWITCH, TACTILE							
S003	1-692-431-21	SWITCH, TACTILE							
S004	1-692-431-21	SWITCH, TACTILE							
S005	1-692-431-21	SWITCH, TACTILE							
S006	1-692-431-21	SWITCH, TACTILE							
S007	1-692-431-21	SWITCH, TACTILE							
<b><u>TRANSFORMER</u></b>									
T504	△ 1-453-211-11	TRANSFORMER ASSY, FLYBACK (NX-1744//X4E4)							
T603	△ 1-431-675-11	TRANSFORMER, CONVERTER (PIT)							



# COMPLETE PARTS LISTING

<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>									
<b>C</b>												
KV-13M40, 13M50, 13M51, 14MB40, 14MB40A, 14MB40C only												
* A-1331-729-A C MOUNTED PC BOARD												
1-900-800-64	CONNECTOR ASSY, 1P G2 SCREEN											
4-382-854-11	SCREW (M3X10), P, SW (+)											
<u>CAPACITOR</u>												
C751	1-107-652-11	ELECT	10MF	20%	250V							
C752	1-115-350-51	CERAMIC	0.0047MF		2KV							
<u>CONNECTOR</u>												
CN754	1-695-915-11	TAB (CONTACT)										
<u>DIODE</u>												
D754	8-719-901-83	DIODE 1SS83TD										
D755	8-719-901-83	DIODE 1SS83TD										
D756	8-719-901-83	DIODE 1SS83TD										
<u>IC</u>												
IC751	8-759-491-92	IC TDA6107Q-N1										
<u>JACK</u>												
J750 <b>▲</b>	1-251-192-11	SOCKET, CRT										
<u>COIL</u>												
L751	1-410-478-11	INDUCTOR 47UH										
<u>RESISTOR</u>												
R756	1-260-099-11	CARBON	1K	5%	1/2W							
R757	1-260-099-11	CARBON	1K	5%	1/2W							
R758	1-260-099-11	CARBON	1K	5%	1/2W							
R759	1-260-087-11	CARBON	100	5%	1/2W							
R760	1-260-123-11	CARBON	100K	5%	1/2W							
R761	1-216-389-11	METAL OXIDE	1	5%	3W F							
R762	1-260-131-11	CARBON	470K	5%	1/2W							
R763	1-247-807-31	CARBON	100	5%	1/4W							
R764	1-247-807-31	CARBON	100	5%	1/4W							
R765	1-247-807-31	CARBON	100	5%	1/4W							
R766	1-260-131-11	CARBON	470K	5%	1/2W							
R767	1-260-135-11	CARBON	1M	5%	1/2W							
<u>VARIABLE RESISTOR</u>												
RV751	1-230-641-11	RES, ADJ, METAL GLAZE	2.2M									
RV752	1-230-641-11	RES, ADJ, METAL GLAZE	2.2M									

**Note:**

The components identified with shading and a critical symbol (**▲**) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque **▲** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>									
<b>C</b>												
KV-20M40, 20S40, 20S41, 20V80, 21MB40C, 21MB40M, 21MB40P, 21ME40, 21ME40C, 21SB40C, 21SB40M, 21SB40P, 21SE40, 21SE40A, 21SE40C, 21SE80, 21SE80A, 21SE80C, 21XT4A only												
* A-1331-728-A C MOUNTED PC BOARD												
1-900-800-64	CONNECTOR ASSY, 1P G2 SCREEN											
4-382-854-11	SCREW (M3X10), P, SW (+)											
<u>CAPACITOR</u>												
C701	1-107-652-11	ELECT	10MF	20%	250V							
C702	1-115-350-51	CERAMIC	0.0047MF		2KV							
<u>CONNECTOR</u>												
CN704	1-695-915-11	TAB (CONTACT)										
<u>DIODE</u>												
D700	8-719-110-08	DIODE MTZJ-T-77-8.2B										
D702	8-719-991-33	DIODE 1SS133T-77										
D703	8-719-991-33	DIODE 1SS133T-77										
D704	8-719-901-83	DIODE 1SS83TD										
D705	8-719-901-83	DIODE 1SS83TD										
D706	8-719-901-83	DIODE 1SS83TD										
<u>IC</u>												
IC701	8-759-491-92	IC TDA6107Q-N1										
<u>JACK</u>												
J700 <b>▲</b>	1-451-464-11	SOCKET, CRT										
<u>COIL</u>												
L701	1-410-478-11	INDUCTOR 47UH										
<u>TRANSISTOR</u>												
Q701	8-729-119-78	TRANSISTOR 2SC3311A-QRSTA										
<u>RESISTOR</u>												
R701	1-247-887-00	CARBON	220K	5%	1/4W							
R702	1-247-863-91	CARBON	22K	5%	1/4W							
R703	1-249-421-11	CARBON	2.2K	5%	1/4W							
R704	1-249-441-11	CARBON	100K	5%	1/4W							
R705	1-249-416-11	CARBON	820	5%	1/4W							

**Note:**

The components identified with shading and a critical symbol ( $\Delta$ ) are critical for safety. Replace only with part number specified.

**Note:**

Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**COMPLETE PARTS LISTING**

**C** **HZ**

<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>			<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
R706	1-260-099-11	CARBON	1K	5%	1/2W				
R707	1-260-099-11	CARBON	1K	5%	1/2W				
R708	1-260-099-11	CARBON	1K	5%	1/2W				
R709	1-260-087-11	CARBON	100	5%	1/2W				
R710	1-260-123-11	CARBON	100K	5%	1/2W				
R711	1-216-392-11	METAL OXIDE	1.8	5%	3W F				
R713	1-247-807-31	CARBON	100	5%	1/4W				
R714	1-247-807-31	CARBON	100	5%	1/4W				
R715	1-247-807-31	CARBON	100	5%	1/4W				
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<b>HZ</b> <hr/>									
KV-14MB40A, 21SE40A, 21XT4A, 21SE80A only									
* A-1372-117-A HZ BOARD, MOUNTED									
<u>CONNECTOR</u>									
CN901	* 1-580-843-11	PIN, CONNECTOR (POWER)							
CN902	* 1-580-843-11	PIN, CONNECTOR (POWER)							
<u>SWITCH</u>									
S901	$\Delta$ 1-571-433-21	SWITCH, PUSH (AC POWER)							